

---

# Author Index to Volume 244

## April–June 1989

---

**Publisher:** Richard S. Nicholson

**Editor:** Daniel E. Koshland, Jr.

**Deputy Editors**

Philip H. Abelson (*Engineering and Applied Sciences*)

John I. Brauman (*Physical Sciences*)

**Editorial Board**

Elizabeth E. Bailey  
David Baltimore  
William F. Brinkman  
E. Margaret Burbidge  
Philip E. Converse  
Joseph L. Goldstein

Mary L. Good  
F. Clark Howell  
James D. Idol, Jr.  
Leon Knopoff  
Oliver E. Nelson

Helen M. Ranney  
David M. Raup  
Howard A. Schneiderman  
Larry L. Smarr  
Robert M. Solow  
James D. Watson

**Board of Reviewing Editors**

John Abelson  
Qais Al-Awqati  
Don L. Anderson  
Stephen J. Benkovic  
Floyd E. Bloom  
Henry R. Bourne  
James J. Bull  
Kathryn Calame  
Charles R. Cantor  
Ralph J. Cicerone  
John M. Coffin  
Robert Dorfman  
Bruce F. Eldridge  
Paul T. Englund  
Fredric S. Fay  
Theodore H. Geballe  
Roger I. M. Glass

Stephen P. Goff  
Robert B. Goldberg  
Corey S. Goodman  
Jack Gorski  
Stephen J. Gould  
Richard M. Held  
Gloria Heppner  
Eric F. Johnson  
Konrad B. Krauskopf  
Charles S. Levings III  
Richard Losick  
Karl L. Magleby  
Philippa Marrack  
Joseph B. Martin  
John C. McGiff  
Mortimer Mishkin  
Carl O. Pabo  
Yeshayau Pocker

Michael I. Posner  
Dennis A. Powers  
Russell Ross  
James E. Rothman  
Erkki Ruoslahti  
Ronald H. Schwartz  
Vernon L. Smith  
Robert T. N. Tjian  
Virginia Trimble  
Emil Unanue  
Geerat J. Vermeij  
Bert Vogelstein  
Harold Weintraub  
Irving L. Weissman  
George M. Whitesides  
Owen N. Witte  
William B. Wood

**Published by the**

**American Association for the Advancement of Science**

1333 H Street, NW, Washington, DC 20005

Printed in Richmond, Virginia, by The William Byrd Press

Copyright 1989 by the American Association for the Advancement of Science

# Author Index to Volume 244

## April–June 1989

### A

- Abbas, Abul K.: review of *Interleukin 2*, edited by Kendall A. Smith. p994 26 May 1989.
- Abelson, Philip H. (editorials): Combating high journal costs. p1125 9 June 1989. Earth observations from space. p901 26 May 1989. Oil spills. p629 12 May 1989. Progress in energy R&D. p273 21 Apr 1989. Synthetic membranes. p1421 23 June 1989. World food research. p125 14 Apr 1989.
- Adams, Dolph O. See Prpic, Veronica.
- Adelman, John P. See Christie, Macdonald J.
- Aebersold, Ruedi. See Gautam, Narasimhan.
- Aguilera, Greti. See Millan, Monica A.
- Ait-Ouamer, Farid. See O'Neill, Terrence J.
- Akabas, Myles H. See Landry, Donald W.
- Akaiki, Takaaki. See Oda, Tatsuya.
- Al-Awqati, Qais. See Landry, Donald W.
- Albert, Bruce and Ramos, Alcida Rita: Yanomami Indians and anthropological ethics (letter). p632 12 May 1989.
- Alimena, Giuliana. See Donti, Emilio.
- Allan, James S. See Czeisler, Charles A.
- Alter, H. J. See Kuo, G.
- Alter, M. J. See Kuo, G.
- Alvarez, M. G. See Malin, P. E.
- Ames, Bruce N. and Gold, Lois Swirsky: Pesticides, risk, and applesauce (letter). p755 19 May 1989.
- Amon-Böhm, Elfi. See Marschalek, Rolf.
- Anderson, Gene Cranston: review of *Infant Feeding*, edited by John Dobbing. p844 19 May 1989.
- Anderson, Matthew P. See Li, Ming.
- Anderson, Inger. See Knight, Stefan.
- Angelides, Kimon J. See Jones, Owen T.
- Anthony-Cahill, Spencer J. See Noren, Christopher J.
- Appella, Ettore. See Guy, Rina.
- Arnold, E. N.: review of *Phylogenetic Relationships of the Lizard Families*, edited by Richard Estes and Gregory Pregill. p855 19 May 1989.
- Arora, Sunil K. See Mukhopadhyay, Amitabha.
- ar-Rushdi, Abbas. See Rao, Veena N.
- Arscott, Patricia G. See Lee, Gil.
- Avanzi, Giancarlo. See Donti, Emilio.
- Axel, Richard. See Julius, David.
- ### B
- Bachovchin, William W. See Smith, Steven O.
- Baetscher, Manfred. See Gautam, Narasimhan.
- Bakalyar, Heather A. See Krupinski, John.
- Baker, Suzanne J.; Fearon, Eric R.; Nigro, Janice M.; Hamilton, Stanley R.; Preisinger, Ann C.; Jessup, J. Milburn; vanTuinen, Peter; Ledbetter, David H.; Barker, David F.; Nakamura, Yusuke; White, Ray; Vogelstein, Bert: Chromosome 17 deletions and p53 gene mutations in colorectal carcinomas. p217 14 Apr 1989.
- Bakker, C. G. See Visscher, J.
- Ballard, Dean W. See Hoyos, Beatrice.
- Ballou, W. Ripley. See Hoffman, Stephen L.
- Ban, S. D. See Burnett, W. M.
- Barker, David F. See Baker, Suzanne J.
- Barnard, Eric A. See Sicinski, Piotr.
- Barnard, Pene J. See Sicinski, Piotr.
- Barnes, Brian M.: Freeze avoidance in a mammal: body temperatures below 0°C in an arctic hibernator. p1593 30 June 1989.
- Barron, Eric J. and Peterson, William H.: Model simulation of the Cretaceous ocean circulation. p684 12 May 1989.
- Basu, Sandip K. See Mukhopadhyay, Amitabha.
- Bauer, Simon H.: Squaring the Grecian circle (letter). p1531 30 June 1989.
- Beach, Carol M. See Paul, Sudhir.
- Beard, James S. and Lofgren, Gary E.: Effect of water on the composition of partial melts of greenstone and amphibolite. p195 14 Apr 1989.
- Beauchamp, Benoit; Krouse, H. Roy; Harrison, J. Christopher; Nassichuk, Walter W.; Eliuk, Leslie S.: Cretaceous cold-seep communities and methane-derived carbonates in the Canadian Arctic. p53 7 Apr 1989.
- Bechhoefer, Arthur S.: The efficient market hypothesis (letter). p1424 23 June 1989.
- Becker, Peter L.; Singer, Joshua J.; Walsh, John V., Jr.; Fay, Fredric S.: Regulation of calcium concentration in voltage-clamped smooth muscle cells. p211 14 Apr 1989.
- Bednarz, James C.: review of *Peregrine Falcon Populations*, edited by Tom J. Cade, James H. Anderson, Carl G. Thelander, and Clayton M. White. p233 14 Apr 1989.
- Bellofatto, Vivian and Cross, George A. M.: Expression of a bacterial gene in a trypanosomatid protozoan. p1167 9 June 1989.
- Bender, Welcome. See O'Connor, Michael.
- Benfey, Philip N. and Chua, Nam-Hai: Regulated genes in transgenic plants. p174 14 Apr 1989.
- Benkovic, Stephen J. See Janda, Kim D.
- Bennink, Jack R. See Yewdell, Jonathan W.
- Benoist, C. See Böhme, J.
- Bercovici, Dave; Schubert, Gerald; Glatzmaier, Gary A.: Three-dimensional spherical models of convection in the Earth's mantle. p950 26 May 1989.
- Bereano, Philip L.: Biotechnology regulation (letter). p275 21 Apr 1989.
- Berg, Ivar: review of *Effective Social Science*, by Bernard Barber. p1497 23 June 1989.
- Berger, K. See Kuo, G.
- Berinstein, Neil; Levy, Shoshana; Levy, Ronald: Activation of an excluded immunoglobulin allele in a human B lymphoma cell line. p337 21 Apr 1989.
- Bernath, Peter F.; Hinkle, Kenneth H.; Keady, John J.: Direction of C<sub>5</sub> in the circumstellar shell of IRC+10216. p562 5 May 1989.
- Bernstein, Lori R. and Colburn, Nancy H.: AP1/jun function is differentially induced in promotion-sensitive and resistant JB6 cells. p566 5 May 1989.
- Berta, Annalisa; Ray, Clayton E.; Wyss, André R.: Skeleton of the oldest known pinniped, *Enaliarctos mealsi*. p60 7 Apr 1989.
- Beyer, Janice M.: review of *The Whistleblowers*, by Myron Peretz Glazier and Penina Migdal Glazier. p835 19 May 1989.
- Biddle, Wayne (news): Skeleton alleged in the Stealth bomber's closet. p650 12 May 1989.
- Bigler, Robert D. See Kappler, John.
- Birinyi, Louis K. See Wilson, James M.
- Björk, Glenn R.; Wikström, P. Mikael; Byström, Anders S.: Prevention of translational frameshifting by the modified nucleoside I-methylguanosine. p986 26 May 1989.
- Blacher, R. W. See Raina, A. K.
- Blackman, Marcia A.; Marrack, Philippa; Kappler, John: Influence of the major histocompatibility complex on positive thymic selection of V<sub>β</sub>17a<sup>+</sup> T cells. p214 14 Apr 1989.
- Blake, Randolph. See Nawrot, Mark.
- Blakeslee, S. N. See Malin, P. E.
- Blank, Ulrich. See Miller, Larry.
- Bloomfield, Victor A. See Lee, Gil.
- Bogenschutz, Michael P. See Wilson, Craig M.
- Bohlen, S. R. and Mezger, K.: Origin of granulite terranes and the formation of the lowermost continental crust. p326 21 Apr 1989.
- Böhme, J.; Haskins, K.; Stecha, P.; van Ewijk, W.; LeMeur, M.; Gerlinger, P.; Benoist, C.; Mathis, D.: Transgenic mice with I-A on islet cells are normoglycemic but immunologically intolerant. p1179 9 June 1989.
- Böhnlein, Ernst. See Hoyos, Beatrice.
- Bolt, Douglas J. See Pursel, Vernon G.
- Bonino, F. See Kuo, G.
- Booth, William (news): AIDS researchers upset by refusal to share probes on mysterious microbe. p416 28 Apr 1989. New thinking on old growth. p141 14 Apr 1989. U.S. probe meets resistance. p419 28 Apr 1989. WHO seeks global data on sexual practices. p418 28 Apr 1989.
- Bosch, Marnix L.; Earl, Patricia L.; Fargnoli, Kathleen; Picciafuoco, Silvia; Giombini, Fabrizio; Wong-Staal, Flossie; Franchini, Genoveffa: Identification of the fusion peptide of primate immunodeficiency viruses. p694 12 May 1989.
- Boss, Alan P.: review of *Formation and Evolution of Low Mass Stars*, edited by A. K. Dupree and M. T. V. T. Lago. p1598 30 June 1989.
- Boucher, Richard C. See Jetten, Anton M.
- Boyce, Frederick M. See Nabel, Elizabeth G.
- Boyd, R. N.; Takahashi, K.; Perry, Robert J.; Miller, Terry A.: Optimum chemical sites and techniques for searches for negatively charged rare particles. p1450 23 June 1989.
- Boylston, Arthur. See Kappler, John.
- Bradley, Daniel W. See Choo, Qui-Lim. See also Kuo, G.
- Brändén, Carl-Ivar. See Knight, Stefan.
- Brechner, Thomas. See Marschalek, Rolf.
- Breslow, Jan L. See Gavish, Dov.
- Briner, Thomas J. See Roy, Syamal.
- Brinster, Ralph L. See Pursel, Vernon G.
- Brinton, Eliot A. See Gavish, Dov.
- Brodeur, Jacques and McNeil, Jeremy N.: Seasonal microhabitat selection by an endoparasitoid through adaptive modification of host behavior. p226 14 Apr 1989.
- Broom, M. Beth. See Carter, Daniel C.
- Brown, Emery N. See Czeisler, Charles A.
- Brownstein, Bernard H.; Silverman, Gary A.; Little, Randall D.; Burke, David T.; Korsmeyer, Stanley J.; Schlessinger, David; Olson, Maynard V.: Isolation of single-copy human genes from a library of yeast artificial chromosome clones. p1348 16 June 1989.
- Bruce, Melissa A. See Fountain, Jane W.
- Bruns, Gail A. P. See Gessler, Manfred.
- Buffinger, N. See DiMario, J.
- Burke, David T. See Brownstein, Bernard H.
- Burnett, W. M. and Ban, S. D.: Changing prospects for natural gas in the United States. p305 21 Apr 1989.
- Burns, Joseph A. See Nobili, Anna M.
- Byrne, Gregory (news): Earthling: take me to

your teacher. p919 26 May 1989. Fraud and the "glare of the TV camera" p1038 2 June 1989. Market is bullish for Nobel Prize. p290 21 Apr 1989. A modest proposal. p290 21 Apr 1989. Paying your dues. p919 26 May 1989. Save the "data"! p290 21 Apr 1989. Where was Chakrabarty's "bug"? p918 26 May 1989. Byström, Anders S. See Björk, Glenn R.

## C

Calder, William A.: review of *Life's Devices*, by Steven Vogel. p857 19 May 1989.  
Callewaert, Geert. See Näbauer, Michael.  
Callow, Allan D. See Wilson, James M.  
Cambareri, Edward B.; Jensen, Bryan C.; Schab-tach, Eric; Selker, Eric U.: Repeat-induced G-C to A-T mutations in *Neurospora*. p1571 30 June 1989.  
Campbell, Roger G. See Pursel, Vernon G.  
Cañada, Francisco J. See Deigner, Peter S.  
Canizares, Claude R.: review of *Observational Astrophysics*, by Pierre Léna. p851 19 May 1989.  
Capecci, Mario R.: Altering the genome by homologous recombination. p1288 16 June 1989.  
Carland, Francine M. See Jones, Jonathan D. G.  
Carlson, Richard W. See Lambert, David D.  
Carrell, Stefan. See Kappler, John.  
Carrino, John J. See Weil, Susan C.  
Carrow, Grant M.: Science education (letter). p515 5 May 1989.  
Carter, Daniel C.; He, Xiao-min; Munson, Sibyl H.; Twigg, Pamela D.; Gernert, Kim M.; Broom, M. Beth; Miller, Teresa Y.: Three-dimensional structure of human serum albumin. p1195 9 June 1989.  
Cartmill, Matt: review of *Bones, Bodies, Behavior*, edited by George W. Stocking, Jr. p858 19 May 1989.  
Carvalho, Pilar. See Millan, Monica A.  
Castro, Carl A. See Foster, Tom C.  
Catt, Kevin J. See Millan, Monica A.  
Cavalli-Sforza, L.; Piazza, A.; Menozzi, P.; Moutian, J.: Genetic and linguistic evolution (letter). p1128 9 June 1989.  
Cawthon, Richard M. See O'Connell, Peter.  
Cech, Thomas R. See McSwiggen, James A.  
Chagnon, Napoleon A.: Yanomamö survival (letter). p11 7 Apr 1989.  
Changchien, Li-Ming. See Stern, Seth.  
Chaudhuri, Gautam. See Mukhopadhyay, Amittabha.  
Chen, Irvin S. Y. See Lee, Helen.  
Chen, Suzie; Teicher, Luz C.; Kazim, Debora; Pollack, Robert E.; Wise, Leigh S.: Commitment of mouse fibroblasts to adipocyte differentiation by DNA transfection. p580 5 May 1989.  
Chin, William W. See Hodin, Richard A.  
Chisholm, Rex L. See Weil, Susan C.  
Choi, Yongwon. See Kappler, John.  
Choo, Q.-L. See Kuo, G.  
Choo, Qui-Lim; Kuo, George; Weiner, Amy J.; Overby, Lacy R.; Bradley, Daniel W.; Houghton, Michael: Isolation of a cDNA clone derived from a blood-borne non-A, non-B viral hepatitis genome. p359 21 Apr 1989.  
Christensen, John N.; Rosenfeld, John L.; DePaolo, Donald J.: Rates of tectonometamorphic processes from rubidium and strontium isotopes in garnet. p1465 23 June 1989.  
Christie, Macdonald J.; Adelman, John P.; Douglass, James; North, R. Alan: Expression of a cloned rat brain potassium channel in *Xenopus* oocytes. p221 14 Apr 1989.  
Chua, Nam-Hai. See Benfey, Philip N.  
Chupp, Edward L. See Rieger, Erich.  
Cicchano, Aaron. See Mayer, Aric.

Cipra, Barry A. (news): Another piece of 3.14159...? p1260 16 June 1989. The circle can be squared! p528 5 May 1989. Do mathematicians still do math? p769 19 May 1989. The sorcerer's apprentice. p770 19 May 1989.  
Clancy, John P. See Li, Ming.  
Clapham, David E. See Kim, Donghee.  
Clark, David L.: review of *The Conodonts*, by Walter C. Sweet. p856 19 May 1989.  
Clark, James M.; Jacobs, Louis L.; Downs, William R.: Mammal-like dentition in a Mesozoic crocodylian. p1064 2 June 1989.  
Clarkson, Sarah. See Homsy, Jacques.  
Cleemann, Lars. See Näbauer, Michael.  
Cody, R. L. See Ervin, P. R., Jr.  
Cohen, Irun R. See Lohse, Ansgar W.  
Colburn, Nancy H. See Bernstein, Lori R.  
Coleman, J. S. See Laumann, E. O.  
Collins, Francis S. See Fountain, Jane W.  
Colombo, M. See Kuo, G.  
Conkey, Margaret W.: review of *Stylistic Boundaries Among Mobile Hunter-Foragers*, by C. Garth Sampson. p1500 23 June 1989.  
Cook, Kathleen S. See Rosen, Barry S.  
Cook, Richard G. See Mollick, Joseph A.  
Cooksy, A. L. See Heath, J. R.  
Cooper, William E.: Faculty salaries (letter). p904 26 May 1989.  
Coppens, P. See Lee, P.  
Cousen, Françoise. See Krupinski, John.  
Cragoe, Edward, Jr. See Landry, Donald W.  
Crawford, Mark (news): Agricultural groups push research plan. p140 14 Apr 1989. ARCO solar sale raises concerns over potential technology export. p918 26 May 1989. Beville wants foreign SSC funding up front. p24 7 Apr 1989. Bromley in line for science adviser. p283 21 Apr 1989. Budget squeeze causes fission in fusion labs. p138 14 Apr 1989. Cold fusion: is it hot enough to make power? p423 28 Apr 1989. DOE boosts research for defense clean-up. p24 7 Apr 1989. Fusion plan ignites controversy at DOE. p1434 23 June 1989. MIT-industry links draw congressional attention. p1136 9 June 1989. Peoples selected head of Fermilab. p524 5 May 1989. Utah looks to Congress for cold fusion cash. p522 5 May 1989. See also Pool, Robert.  
Croce, Carlo M. See Rao, Veena N.  
Crooke, Rosanne. See Fox, Niles.  
Cross, George A. M. See Bellofatto, Vivian.  
Cross, Sharon L.; Halden, Nancy F.; Lenardo, Michael J.; Leonard, Warren J.: Functionally distinct NF- $\kappa$ B binding sites in the immunoglobulin  $\kappa$  and IL-2 receptor  $\alpha$  chain genes. p466 28 Apr 1989.  
Culliton, Barbara J. (news): Another congressional look at fraud. p1538 30 June 1989. Credit for whistle-blower vanishes. p643 12 May 1989. The Dingle probe finally goes public. p643 12 May 1989. Dingle v. Baltimore. p412 28 Apr 1989. Fighting cancer with designer drugs. p1430 23 June 1989. Fire devastates Jackson lab. p767 19 May 1989. Frazier honored by psychiatrists. p649 12 May 1989. Gene test begins. p913 26 May 1989. Hughes makes awards to university science. p1038 2 June 1989. "I am not a neat person." p645 12 May 1989. It's not over yet. p765 19 May 1989. NIH reopens Baltimore inquiry. p520 5 May 1989. NIH: the good old days. p1437 23 June 1989. NIH to use forensics. p646 12 May 1989. 19 say no to NIH job. p1538 30 June 1989. Nobelists back animal research. p524 5 May 1989. A question of intent. p646 12 May 1989. The rocky road to remission. p1432 23 June 1989. The story so far—chronology, dramatic personae. p413 28 Apr 1989. Superpay for NIH superstars. p1038 2 June 1989. Whose notes are they? p765 19 May 1989.

Wyngaarden to leave NIH. p414 28 Apr 1989.  
Culver, Melanie. See O'Connell, Peter.  
Cunningham, Brian C. and Wells, James A.: High-resolution epitope mapping of hGH-receptor interactions by alanine-scanning mutagenesis. p1081 2 June 1989.  
Czeisler, Charles A.; Kronauer, Richard E.; Allan, James S.; Duffy, Jeanne F.; Jewett, Megan E.; Brown, Emery N.; Ronda, Joseph M.: Bright light induction of strong (type 0) resetting of the human circadian pacemaker. p1328 16 June 1989.

## D

Damm, Deborah. See Rosen, Barry S.  
Dannemeyer, William E.: Proposed "sea survey" (letter). p1530 30 June 1989.  
Darling, Douglas S. See Hodin, Richard A.  
Darlison, Mark G. See Scicinski, Piotr.  
Darovskikh, A. See Lee, P.  
Daston, Lorraine and Gigerenzer, Gerd: review of *Patterns, Thinking, and Cognition*, by Howard Margolis. p1094 2 June 1989.  
Davis, James L. See Prescott, William H.  
Deen, D. F. See Milam, K. M.  
de Geus, Pieter. See Kuipers, Oscar P.  
de Haas, Gerard H. See Kuipers, Oscar P.  
Deigner, Peter S.; Law, Wing C.; Cañada, Francisco J.; Rando, Robert R.: Membranes as the energy source in the endergonic transformation of vitamin A to 11-*cis*-retinol. p968 26 May 1989.  
Delfino, Jose M. See Stankovic, Charles J.  
Demediuk, Paul. See Faden, Alan I.  
DePaolo, Donald J. See Christensen, John N.  
Derber, Charles. See Schwartz, William A.  
Deutch, John M.: The decision to modernize U.S. intercontinental ballistic missiles. p1445 23 June 1989.  
de Vargas, Lina Moitoso; Kim, Sunghoon; Landy, Arthur: DNA looping generated by DNA bending protein IHF and the two domains of lambda integrase. p1450 23 June 1989.  
Dewald, Gordon W. See Fountain, Jane W.  
Diaz, Manuel O. See Weil, Susan C.  
Diaz, Ruben. See Mayorga, Luis S.  
Dickson, David (news): Acronyms in search of particles. p1258 16 June 1989. British biologists learn small is not beautiful. p766 19 May 1989. "Dangerous" liaisons in cell biology. p1539 30 June 1989. German biotech firms flee regulatory climate. p1251 16 June 1989. "L'affaire Pasteur" prompts Canadian outcry. p280 21 Apr 1989. New machine sparks rivalries at CERN. p1257 16 June 1989. Old technique, new luck. p1539 30 June 1989. Science artifacts on the block. p649 12 May 1989. Soviets admit 1957 nuclear mishap. p1435 23 June 1989. Watson floats a plan to carve up the genome. p521 5 May 1989.  
\_\_\_\_\_ and Kirk, Don (news): Germany sets up new space agency. p648 12 May 1989.  
Dienstag, J. L. See Kuo, G.  
Dijkstra, Bauke W. See Kuipers, Oscar P.  
DiMario, J.; Buffinger, N.; Yamada, S.; Strohm, R. C.: Fibroblast growth factor in the extracellular matrix of dystrophic (mdx) mouse muscle. p688 12 May 1989.  
DiMauro, Salvatore. See Schon, Eric A.  
Dingermann, Theodor. See Marschalek, Rolf.  
Dinsart, Christiane. See Libert, Frédéric.  
Doering, Don S.: The Dingle investigation (letter). p1243 16 June 1989.  
Doi, Takeshi. See Hatakeyama, Masanori.  
Donti, Emilio; Montanucci, Manuela; Longo, Letizia; Mencarelli, Amedea; Pandolfi, Pierpaolo; Tabilio, Antonio; Nanni, Mauro; Alimena, Giuliana; Avanzi, Giancarlo; Pegoraro,

Luigi; Grignani, Fausto; Pelicci, Pier Giuseppe: The myeloperoxidase gene in acute promyelocytic leukemia (technical comment). p824 19 May 1989.

Dooner, Hugo K. See Jones, Jonathan D. G.

Doudna, Jennifer A. See Rajagopal, Jayaraj.

Douglass, James. See Christie, Macdonald J.

Downs, William R. See Clark, James M.

Drenth, Jan. See Kuipers, Oscar P.

Dress, Andreas. See Eigen, Manfred.

Duffy, David Cameron: Carbon-sequestering science: an alternative to "pesky electronics"? (letter). p904 26 May 1989.

Duffy, Jeanne F. See Czeisler, Charles A.

Dumont, Jacques E. See Libert, Frédéric.

## E-F

Earl, Patricia L. See Bosch, Marnix L.

Edelman, Aleksander. See Landry, Donald W.

Edsall, John T.: review of *Otto Folin*, by Samuel Meites. p719 12 May 1989.

Eigen, Manfred; Lindemann, Björn F.; Tietze, Manfred; Winkler-Oswatitsch, Ruthild; Dress, Andreas; von Haeseler, Arndt: How old is the genetic code? Statistical geometry of tRNA provides an answer. p673 12 May 1989.

Eilon, Gertrude B.: The purine path to chemotherapy. p41 7 Apr 1989.

Eliuk, Leslie S. See Beauchamp, Benoit.

Elkind, David: Educational reform (letter). p631 12 May 1989.

Ellestad, George A. See Zein, Nada.

Erickson, Paul A.: review of *Eugène Dubois and the Ape-Man from Java* by Bert Theunissen. p859 19 May 1989.

Ervin, P. R., Jr.; Kaminski, M. S.; Cody, R. L.; Wicha, M. S.: Production of mammatatin, a tissue-specific growth inhibitor, by normal human mammary cells. p1585 30 June 1989.

Evans, D. Fennell. See Lee, Gil.

Fach, Clemens. See Sharpe, Lindsay T.

Faden, Alan I.; Demediuk, Paul; Panter, S. Scott; Vink, Robert: The role of excitatory amino acids and NMDA receptors in traumatic brain injury. p798 19 May 1989.

Fales, H. M. See Raina, A. K.

Fancher, Raymond E.: review of *Lewis M. Terman* by Henry L. Minton, and *Schools as Sorters*, by Paul Davis Chapman. p1596 30 June 1989.

Fargnoli, Kathleen. See Bosch, Marnix L.

Farkas, George: review of *Employment Futures*, by Paul Osterman. p836 19 May 1989.

Farr-Jones, Shauna. See Smith, Steven O.

Fauci, Anthony S. See Poli, Guido.

Fay, Fredric S. See Becker, Peter L.

Fay, James A. and Golomb, Dan S.: Acid rain models (letter). p127 14 Apr 1989.

Fearon, Eric R. See Baker, Suzanne J. See also Vogelstein, Bert.

Feinstein, Paul G. See Krupinski, John.

Ferrer, Jorge F. and Gupta, Phalguni: Notification to readers (letter). p632 12 May 1989.

Fields, R. Douglas. See Nelson, Phillip G.

Figueredo, Florencio. See Prpic, Veronica.

Finbloom, David S. See Hoffman, Stephen L.

Firestein, Stuart and Werblin, Frank: Odor-induced membrane currents in vertebrate-olfactory receptor neurons. p79 7 Apr 1989.

Fischetti, Vincent A.; Hodges, Walter M.; Hruby, Dennis E.: Protection against streptococcal pharyngeal colonization with a vaccinia: M protein recombinant. p1487 23 June 1989.

Fishman, Mark C. See Zuber, Mauricio X.

Folks, Thomas M. See Poli, Guido.

Fong, Ivan K.: The *Chevron* doctrine (letter). p12 7 Apr 1989.

Foo-Philips, Michele. See Guy, Rina.

Forrest, David J. See Rieger, Erich.

Foskett, J. Kevin and Melvin, James E.: Activation of salivary secretion: coupling of cell volume and  $[Ca^{2+}]_i$  in single cells. p1582 30 June 1989.

Foster, J. S. See Mizes, H. A.

Foster, Tom C.; Castro, Carl A.; McNaughton, Bruce L.: Spatial selectivity of rat hippocampal neurons: dependence on preparedness for movement. p1580 30 June 1989.

Fountain, Jane W.; Wallace, Margaret R.; Bruce, Melissa A.; Seizinger, Bernd R.; Menon, Anil G.; Gusella, James F.; Michels, Virginia V.; Schmidt, Michael A.; Dewald, Gordon W.; Collins, Francis S.: Physical mapping of a translocation breakpoint in neurofibromatosis. p1085 2 June 1989.

Fournier, R. E. Keith. See O'Connell, Peter.

Fox, Cecil H.: Responsibility (letter). p1243 16 June 1989.

Fox, Michael W.: Animals in the laboratory (letter). p409 28 Apr 1989.

Fox, Niles; Crooke, Rosanne; Hwang, Lih-Hwa S.; Schibler, Ueli; Knowles, Barbara B.; Solter, Davor: Metastatic hibermomas in transgenic mice expressing an  $\alpha$ -amylase-SV40 T antigen hybrid gene. p460 28 Apr 1989.

Fraley, Robert T. See Gasser, Charles S.

Franchini, Genoveffa. See Bosch, Marnix L.

Frangione, Blas. See Gowda, D. Channe.

Freeman, A. Myrick, III: Old cars and taxation (letter). p127 14 Apr 1989.

Freidel, David: review of *Household and Community in the Mesoamerican Past*, edited by Richard R. Wilk and Wendy Ashmore. p863 19 May 1989.

French, Deborah L.; Laskov, Reuven; Scharff, Matthew D.: The role of somatic hypermutation in the generation of antibody diversity. p1152 9 June 1989.

Friedman, Louis: Planet exploration (letter). p515 5 May 1989.

Friedmann, Theodore: Progress toward human gene therapy. p1275 16 June 1989.

## G-H

Gagnon, J. H. See Laumann, E. O.

Gao, Jiali; Kuczera, Krzysztof; Tidor, Bruce; Karplus, Martin: Hidden thermodynamics of mutant proteins: a molecular dynamics analysis. p1069 2 June 1989.

Gao, Y. See Lee, P.

Gasser, Charles S. and Fraley, Robert T.: Genetically engineering plants for crop improvement. p1293 16 June 1989.

Gautam, Narasimhan; Baetscher, Manfred; Aebersold, Ruedi; Simon, Melvin I.: A G protein gamma subunit shares homology with ras proteins. p971 26 May 1989.

Gavish, Dov; Brinton, Eliot A.; Breslow, Jan L.: Heritable allele-specific differences in amounts of apoB and low-density lipoproteins in plasma. p72 7 Apr 1989.

Gawdi, Gowind. See Prpic, Veronica.

Geffer, Malcolm L. See Roy, Syamal.

Gelfand, Erwin W. See Kappler, John.

Geng, Yan. See Sicinski, Piotr.

Gerlinger, P. See Böhme, J.

Gernert, Kim M. See Carter, Daniel C.

Gessler, Manfred; Simola, Kalle O. J.; Bruns, Gail A. P.: Cloning of breakpoints of a chromosome translocation identifies the AN2 locus. p1575 30 June 1989.

Ghiso, Jorge. See Gowda, D. Channe.

Gigerenzer, Gerd. See Daston, Lorraine.

Gilman, Alfred G. See Krupinski, John.

Giombini, Fabrizio. See Bosch, Marnix L.

Gitnick, G. L. See Kuo, G.

Glantz, Stanton A.: Financial impact of animal regulations (letter). p1531 30 June 1989.

Glatzmaier, Gary A. See Bercovici, Dave.

Glazer, A. M.: review of *Structural and Magnetic Phase Transitions in Minerals*, edited by S. Ghose, J. M. D. Coey, and E. Salje. p478 28 Apr 1989.

Glazer, Robert I.: Fund-raising and NIH (letter). p128 14 Apr 1989.

Godolphin, William. See Slamon, Dennis J.

Goh, Joanne W. and Pennefather, Peter S.: A pertussis toxin-sensitive G protein in hippocampal long-term potentiation. p980 26 May 1989.

Gold, Lois Swirsky. See Ames, Bruce N.

Golomb, Dan S. See Fay, James A.

Goodman, Daniel W. See Zuber, Mauricio X.

Goodstein, David L.: review of *Ideas and Information*, by Arno Penzias. p90 7 Apr 1989.

Goodway, Martha. See Yener, K. Aslihan.

Gossler, Achim; Joyner, Alexandra L.; Rossant, Janet; Skarnes, William C.: Mouse embryonic stem cells and reporter constructs to detect developmentally regulated genes. p463 28 Apr 1989.

Gowda, D. Channe; Margolis, Renée K.; Frangione, Blas; Ghiso, Jorge; Larrondo-Lillo, Milton; Margolis, Richard U.: Relation of the amyloid  $\beta$  protein precursor to heparan sulfate proteoglycans (technical comment). p826 19 May 1989.

Green, Christopher J. See Waugh, David S.

Greenberg, Donald P.: Light reflection models for computer graphics. p166 14 Apr 1989.

Greenberg, S. See Kluender, Keith R.

Greene, Warner C. See Hoyos, Beatrice.

Greengard, Paul. See Li, Ming.

Griffin, Robert G. See Smith, Steven O.

Griffith, Michael C. See Noren, Christopher J.

Grignani, Fausto. See Donti, Emilio.

Groth, Edward, III: Alar in apples (letter). p755 19 May 1989.

Groves, Colin P.: review of *A Primate Radiation*, edited by Annie Gautier-Hion, François Bourlière, Jean-Pierre Gautier, and Jonathan Kingdon. p860 19 May 1989.

Groves, Douglas L. See Rosen, Barry S.

Gruebele, M. H. W. See Heath, J. R.

Gruenert, Dieter C. See Hwang, Tzyh-Chang.

Guggino, William B. See Hwang, Tzyh-Chang.

Gupta, Phalguni. See Ferrer, Jorge F.

Gusella, James F. See Fountain, Jane W.

Gust, Devens and Moore, Thomas A.: Mimicking photosynthesis. p35 7 Apr 1989.

Guy, Rina; Ullrich, Stephen J.; Foo-Philips, Michele; Hathcock, Karen S.; Appella, Ettore; Hodes, Richard J.: Antigen-specific helper function of cell-free T cell products bearing TCR V $\beta$ 8 determinants. p1477 23 June 1989.

Halden, Nancy F. See Cross, Sharon L.

Hall, Zach W. See Ralston, Evelyn.

Hamamoto, Takayoshi. See Oda, Tatsuya.

Hamilton, Stanley R. See Baker, Suzanne J. See also Vogelstein, Bert.

Hammel, H. B.: Neptune cloud structure at visible wavelengths. p1165 9 June 1989.

Hammer, Robert E. See Pursel, Vernon G.

Handler, Richard: review of *Ruth Benedict*, by Margaret M. Caffrey. p369 21 Apr 1989.

Hanks, T. C. See Holzer, T. L.

Harford, Joe B. See Hentze, Matthias W.

Hari, Riitta and Lounasmaa, Olli V.: Recording and interpretation of cerebral magnetic fields. p432 28 Apr 1989.

Harrison, J. Christopher. See Beauchamp, Benoit.

Hartl, Daniel L.: review of *Eukaryotic Transposable Elements as Mutagenic Agents*, edited by Michael E. Lambert, John F. McDonald, and I. Bernard Weinstein. p1499 23 June 1989.

Harvey, Paul H. See Pagel, Mark D.

Harvey, Robert D. and Hume, Joseph R.: Autonomic regulation of a chloride current in heart.

p983 26 May 1989.

- Haskins, K. See Böhm, J.  
Hastorf, Christine A. See Johannessen, Sissel.  
Hatakeyama, Masanori; Tsudo, Mitsuru; Minamoto, Seiji; Kono, Takeshi; Doi, Takeshi; Miyata, Takashi; Miyasaka, Masayuki; Taniguchi, Tadatsugu: Interleukin-2 receptor  $\beta$  chain gene: generation of three receptor forms by cloned human  $\alpha$  and  $\beta$  chain cDNA's. p551 5 May 1989.  
Hathcock, Karen S. See Guy, Rina.  
Haugerud, R. A. See Kunk, M. J.  
Hayes, D. K. See Raina, A. K.  
He, Xiao-min. See Carter, Daniel C.  
Heath, J. R.; Cooksy, A. L.; Gruebele, M. H. W.; Schmuttenmaer, C. A.; Saykally, R. J.: Diode-laser absorption spectroscopy of supersonic carbon cluster beams: the  $\nu_3$  spectrum of  $C_5$ . p564 5 May 1989.  
Heinemann, Stefan H. See Stankovic, Charles J.  
Hemley, R. J. See Mao, H. K.  
Hentze, Matthias W.; Rouault, Tracey A.; Harford, Joe B.; Klausner, Richard D.: Oxidation-reduction and the molecular mechanism of a regulatory RNA-protein interaction. p357 21 Apr 1989.  
Heppenheimer, T. A. See Pool, Robert.  
Herman, Brian. See Prpic, Veronica.  
Herron, Lynne. See Kappler, John.  
Higbie, P. R. See Hones, E. W.  
Hildreth, James E. K. and Orentas, Rimas J.: Involvement of a leukocyte adhesion receptor (LFA-1) in HIV-induced syncytium formation. p1075 2 June 1989.  
Hinkle, Kenneth H. See Bernath, Peter F.  
Hirano, Takashi. See Oda, Tatsuya.  
Hodes, Richard J. See Guy, Rina.  
Hodges, Kip: review of *The Geological Evolution of Tibet*. p1202 9 June 1989.  
Hodges, Walter M. See Fischetti, Vincent A.  
Hodin, Richard A.; Lazar, Mitchell A.; Wintman, Bruce I.; Darling, Douglas S.; Koenig, Ronald J.; Larsen, P. Reed; Moore, David D.; Chin, William W.: Identification of a thyroid hormone receptor that is pituitary-specific. p76 7 Apr 1989.  
Hoffman, Stephen L.; Isenbarger, Daniel; Long, Gary W.; Sedegah, Martha; Szarfman, Ana; Waters, Leslie; Hollingdale, Michael R.; van der Meide, Peter H.; Finbloom, David S.; Ballou, W. Ripley: Sporozoite vaccine induces genetically restricted T cell elimination of malaria from hepatocytes. p1078 2 June 1989.  
Holden, Constance (news): Academy panel joins the fray over job testing. p1036 2 June 1989. Cambridge to oversee animal research. p1253 16 June 1989. Computers make slow progress in class. p906 26 May 1989. EPA drafts new research agenda. p1253 16 June 1989. Here and there, a few bold experiments. p906 26 May 1989. Monkey euthanasia stalled by activists. p1437 23 June 1989. A preemptive strike for animal research. p415 28 Apr 1989. Research group forswears financial ties to firms whose drugs it tests. p282 21 Apr 1989. Somali scientists freed. p24 7 Apr 1989. Wanted: 675,000 future scientists and engineers. p1536 30 June 1989.  
Hollenbach, Paul W. See Prpic, Veronica.  
Hollingdale, Michael R. See Hoffman, Stephen L.  
Holloway, David: review of *Vospominaniia ob Igore Vasil'eviche Kurchatove*, edited by A. P. Aleksandrov. p846 19 May 1989.  
Holt, John A. See Slamon, Dennis J.  
Holzer, T. L.; Youd, T. L.; Hanks, T. C.: Dynamics of liquefaction during the 1987 Superstition Hills, California, earthquake. p56 7 Apr 1989.  
Homsy, Jacques; Meyer, Mia; Tateno, Masatoshi; Clarkson, Sarah; Levy, Jay A.: The Fc and not CD4 receptor mediates antibody enhancement of HIV infection in human cells. p1357 16 June 1989.  
Hones, E. W. and Higbie, P. R.: Distribution and detection of positrons from an orbiting nuclear reactor. p448 28 Apr 1989.  
Hooper, Scott L. and Moulins, Maurice: Switching of neuron from one network to another by sensory-induced changes in membrane properties. p1587 30 June 1989.  
Horn, S. See Milam, K. M.  
Houghton, Michael. See Choo, Qui-Lim. See also Kuo, G.  
Howell, Robert R. See Nash, Douglas B.  
Hoyos, Beatrice; Ballard, Dean W.; Böhnlein, Ernst; Siekevitz, Miriam; Greene, Warner C.: Kappa B-specific DNA binding proteins: role in the regulation of human interleukin-2 gene expression. p457 28 Apr 1989.  
Hruby, Dennis E. See Fischetti, Vincent A.  
Hubbard, H. M.: Photovoltaics today and tomorrow. p297 21 Apr 1989.  
Hubel, David H.: Animals in the laboratory (letter). p409 28 Apr 1989.  
Huebner, Kay F. See Miller, Carl W. See also Rao, Veena N.  
Huenneke, Laura F.: review of *Conservation Biology in Hawaii*, edited by Charles P. Stone and Danielle B. Stone, *Islands in a Far Sea*, by John L. Cullinary, and *Hawaii*, by Gavin Daws. p854 19 May 1989.  
Huganir, Richard. See Hwang, Tzyh-Chang.  
Hume, Joseph R. See Harvey, Robert D.  
Hurd, Michael D.: The economic status of the elderly. p659 12 May 1989.  
Hwang, Lih-Hwa S. See Fox, Niles.  
Hwang, Tzyh-Chang; Lu, Luo; Zeitlin, Pamela L.; Gruenert, Dieter C.; Haganir, Richard; Guggino, William B.:  $Cl^-$  channels in CF: lack of activation by protein kinase C and cAMP-dependent protein kinase. p1351 16 June 1989.
- ### I-J
- Isenbarger, Daniel. See Hoffman, Stephen L.  
Isobe, Masaharu. See Rao, Veena N.  
Izett, G. A. See Kunk, M. J.  
Izumi, Shun-ichiro. See Millan, Monica A.  
Jacob, Chaim O. See Newton, Salette M. C.  
Jacobs, Louis L. See Clark, James M.  
Jaffe, H. See Raina, A. K.  
Janda, Kim D.; Benkovic, Stephen J.; Lerner, Richard A.: Catalytic antibodies with lipase activity and R or S substrate selectivity. p437 28 Apr 1989.  
Janis, Eric M.; Kaufmann, Stefan H. E.; Schwartz, Ronald H.; Pardoll, Drew M.: Activation of  $\gamma\delta$  T cells in the primary immune response to *Mycobacterium tuberculosis*. p707 12 May 1989.  
Jensen, Bryan C. See Cambareri, Edward B.  
Jessell, Thomas M. See Julius, David.  
Jessup, J. Milburn. See Baker, Suzanne J.  
Jetten, Anton M.; Yankaskas, James R.; Stutts, M. Jackson; Willumsen, Niels J.; Boucher, Richard C.: Persistence of abnormal chloride conductance regulation in transformed cystic fibrosis epithelia. p1472 23 June 1989.  
Jewett, Megan E. See Czeisler, Charles A.  
Johannessen, Sissel and Hastorf, Christine A.: Corn and culture in central Andean prehistory. p690 12 May 1989.  
Johnson, Donald R. See Paul, Sudhir.  
Johnson, Michael K.: review of *The Bioinorganic Chemistry of Nickel*, edited by Jack R. Lancaster, Jr. p591 5 May 1989.  
Jones, David T. and Reed, Randall R.:  $G_{olf}$ : an olfactory neuron specific-G protein involved in odorant signal transduction. p790 19 May 1989.  
Jones, Jonathan D. G.; Carland, Francine M.; Maliga, Pal; Dooner, Hugo K.: Visual detection of transposition of the maize element *Activator (Ac)* in tobacco seedlings. p204 14 Apr 1989.  
Jones, Lovell A. See Slamon, Dennis J.  
Jones, Owen T.; Kunze, Diana L.; Angelides, Kimon J.: Localization and mobility of  $\omega$ -conotoxin-sensitive  $Ca^{2+}$  channels in hippocampal CA1 neurons. p1189 9 June 1989.  
Joyner, Alexandra L. See Gossler, Achim.  
Jukes, Thomas H.: Alar and apples (letter). p515 5 May 1989.  
Julius, David; Livelli, Thomas J.; Jessell, Thomas M.; Axel, Richard: Ectopic expression of the serotonin 1c receptor and the triggering of malignant transformation. p1057 2 June 1989.  
June, Carl H. See Lindsten, Tullia.
- ### K
- Kalf, Jacob: review of *Vegetation of Inland Waters*, edited by J. J. Symoens. p235 14 Apr 1989.  
Kaminski, M. S. See Ervin, P. R., Jr.  
Kanbach, Gottfried. See Rieger, Erich.  
Kanter, E. P. See Vager, Z.  
Kappler, John. See Blackman, Marcia A. —; Kotzin, Brian; Herron, Lynne; Gelfand, Erwin W.; Bigler, Robert D.; Boylston, Arthur; Carrell, Stefan; Posnett, David N.; Choi, Yongwon; Marrack, Philippa: V $\beta$ -specific stimulation of human T cells by staphylococcal toxins. p811 19 May 1989.  
Kaptan, Ergun. See Yener, K. Aslihan.  
Karin, Nathan. See Lohse, Ansgar W.  
Karns, Larry R. See Zuber, Mauricio X.  
Karplus, Martin. See Gao, Jiali.  
Karwoski, Chester J.; Lu, Hong-Kai; Newman, Eric A.: Spatial buffering of light-evoked potassium increases by retinal Müller (glial) cells. p578 5 May 1989.  
Kaufmann, Stefan H. E. See Janis, Eric M.  
Kazim, Debora. See Chen, Suzie.  
Keady, John J. See Bernath, Peter F.  
Keim, P. See Raina, A. K.  
Keith, Duane E. See Slamon, Dennis J.  
Kempe, T. G. See Raina, A. K.  
Kennedy, Eugene: review of *For the Love of Enzymes*, by Arthur Kornberg. p852 19 May 1989.  
Kenyon, Cynthia. See Rine, Jasper.  
Kern, Scott E. See Vogelstein, Bert.  
Kerr, Richard A. (news): Another movement in the dance of the plates. p529 5 May 1989. Did the roof of the world start an ice age? p1441 23 June 1989. Does chaos permeate the solar system? p144 14 Apr 1989. Flurry of quakes in L.A. p1542 30 June 1989. Forecasting pushed too far. p1139 9 June 1989. Greenhouse models vs. reality. p1042 2 June 1989. Hansen vs. the world on the greenhouse threat. p1041 2 June 1989. How to stir up a climate change. p1442 23 June 1989. NASA racing the sun to save a satellite. p1443 23 June 1989. New fault picture points toward Bay area quakes. p286 21 Apr 1989. A new way to forecast next season's climate. p30 7 Apr 1989. Nyos, the killer lake, may be coming back. p1541 30 June 1989. Soviet failure at Mars a reminder of risks. p26 7 Apr 1989. Telling weathermen when to worry. p1137 9 June 1989.  
Kerrick, Alan D. See O'Neill, Terrence J.  
Kieffer, Susan W.: review of *Explosion Pipes*, by Vladimir A. Milashev. p479 28 Apr 1989.  
Kim, Donghee and Clapham, David E.: Potassium channels in cardiac cells activated by arachidonic acid and phospholipids. p1174 9 June 1989.  
Kim, Sunghoon. See de Vargas, Lina Moitoso.  
Kinet, Jean-Pierre. See Miller, Larry.

Kinter, Audrey. *See* Poli, Guido.  
 Kirchner, Wolfgang H. *See* Towne, William F.  
 Kirk, Don. *See* Dickson, David.  
 Kitchingman, Geoffrey. *See* Miller, Carl W.  
 Klausner, Richard D. *See* Hentze, Matthias W.  
 Kluender, Keith R. and S. Greenberg: A specialization for speech perception? (letter). p1530 30 June 1989.  
 Klun, J. A. *See* Raina, A. K.  
 Knight, Stefan; Andersson, Inger; Brändén, Carl-Ivar: Reexamination of the three-dimensional structure of the small subunit of RuBisCo from higher plants. p702 12 May 1989.  
 Knipping, U. *See* Lindsay, S. M.  
 Knowles, Barbara B. *See* Fox, Niles.  
 Koeffler, H. Phillip. *See* Miller, Carl W.  
 Koenig, Ronald J. *See* Hodin, Richard A.  
 Koerner, R. M.: Ice core evidence for extensive melting of the Greenland ice sheet in the last interglacial. p964 26 May 1989.  
 Kono, Takeshi. *See* Hatakeyama, Masanori.  
 Koo, David C.: review of *Proceedings of a Workshop on Optical Surveys for Quasars*, edited by Patrick S. Osmer, Alain C. Porter, Richard F. Green, and Craig B. Foltz. p590 5 May 1989.  
 Korkegi, Robert H.: Space facility (letter). p1030 2 June 1989.  
 Korsmeyer, Stanley J. *See* Brownstein, Bernard H.  
 Koshland, Daniel E., Jr. (editorials): The confusion profusion. p753 19 May 1989. The engineering of species. p1202 9 June 1989. Drunk driving and statistical morality. p1513 5 May 1989. Interview with a risk expert. p1529 30 June 1989. Low probability-high consequence accidents. p405 28 Apr 1989. Scare of the week. p9 7 Apr 1989.  
 Koski, Michael S. *See* Lambert, David D.  
 Kotzin, Brian. *See* Kappler, John.  
 Krech, Shepard, III: review of *Crossroads of Continents*, by William W. Fitzhugh and Aron Crowell. p865 19 May 1989.  
 Kristan, William B., Jr. *See* Loer, Curtis M.  
 Kronauer, Richard E. *See* Czeisler, Charles A.  
 Krouse, H. Roy. *See* Beauchamp, Benoit.  
 Krupinski, John; Coussen, Françoise; Bakalyar, Heather A.; Tang, Wei-Jen; Feinstein, Paul G.; Orth, Kim; Slaughter, Clive; Reed, Randall R.; Gilman, Alfred G.: Adenylyl cyclase amino acid sequence: possible channel- or transporter-like structure. p1558 30 June 1989.  
 Kuczera, Krzysztof. *See* Gao, Jiali.  
 Kuipers, Oscar P.; Thunnissen, Marjolein M. G. M.; de Geus, Pieter; Dijkstra, Bauke W.; Drenth, Jan; Verheij, Hubertus M.; de Haas, Gerard H.: Enhanced activity and altered specificity of phospholipase A<sub>2</sub> by deletion of a surface loop. p82 7 Apr 1989.  
 Kundu, Mukul B.: review of *Astrophysics of the Sun*, by Harold Zirin. p850 19 May 1989.  
 Kunk, M. J.; Izett, G. A.; Haugerud, R. A.; Sutter, J. F.: <sup>40</sup>Ar-<sup>39</sup>Ar dating of the Manson impact structure: Cretaceous-Tertiary boundary crater candidate. p1565 30 June 1989.  
 Kunze, Diana L. *See* Jones, Owen T.  
 Kuo, C. *See* Kuo, G.  
 Kuo, G.; Choo, Q.-L.; Alter, H. J.; Gitnick, G. L.; Redeker, A. G.; Purcell, R. H.; Miyamura, T.; Dienstag, J. L.; Alter, M. J.; Stevens, C. E.; Tegmeier, G. E.; Bonino, F.; Colombo, M.; Lee, W.-S.; Kuo, C.; Berger, K.; Shuster, J. R.; Overby, L. R.; Bradley, D. W.; Houghton, M.: An assay for circulating antibodies to a major etiologic virus of human non-A, non-B hepatitis. p362 21 Apr 1989.  
 Kuo, George. *See* Choo, Qui-Lim.  
 Kurfess, J. D. *See* Share, G. H.  
 Kvenvolden, Keith A.: review of *Seabed Pockmarks and Seepages*, by M. Hovland and A. G. Judd. p590 5 May 1989.

## L

Labruyere, Joann. *See* Olney, John W.  
 Lal, Devendra: review of *Meteorites and the Early Solar System*, edited by John F. Kerridge and Mildred Shapley Matthews. p849 19 May 1989.  
 Lam, Y. Amy. *See* Wood, Keith V.  
 Lambert, David D.; Morgan, John W.; Walker, Richard J.; Shirey, Steven B.; Carlson, Richard W.; Zientek, Michael L.; Koski, Michael S.: Rhenium-osmium and samarium-neodymium isotopic systematics of the Stillwater Complex. p1169 9 June 1989.  
 Landry, Donald W.; Akabas, Myles H.; Redhead, Christopher; Edelman, Aleksander; Cragoe, Edward, J., Jr.; Al-Awqati, Qais: Purification and reconstitution of chloride channels from kidney and trachea. p1469 23 June 1989.  
 Landy, Arthur. *See* de Vargas, Lina Moitoso.  
 Lardy, Nicholas R.: review of *Technological Innovation in China*, by Denis Fred Simon and Detlef Rehn. p369 21 Apr 1989.  
 Larrondo-Lillo, Milton. *See* Gowda, D. Channe.  
 Larsen, P. Reed. *See* Hodin, Richard A.  
 Laskov, Reuven. *See* French, Deborah L.  
 Laumann, E. O.; Gagnon, J. H.; Michaels, S.; Michael, R. T.; Coleman, J. S.: Monitoring the AIDS epidemic in the United States: a network approach. p1186 9 June 1989.  
 Law, Wing C. *See* Deigner, Peter S.  
 Lawrence, John H. *See* Yue, David T.  
 Lazar, Mitchell A. *See* Hodin, Richard A.  
 Leach, Robin. *See* O'Connell, Peter.  
 Lean, J.: Contribution of ultraviolet irradiance variations to changes in the sun's total irradiance. p197 14 Apr 1989.  
 Le Beau, Michelle M. *See* Weil, Susan C.  
 Ledbetter, David H. *See* Baker, Suzanne J. *See also* Miller, Carl W. *See also* O'Connell, Peter.  
 Ledbetter, Jeffrey A. *See* Lindsten, Tullia.  
 Lederman, Leon M.: Observations in particle physics from two neutrinos to the standard model. p664 12 May 1989.  
 Lee, Brendan; Vissing, Henrik; Ramirez, Francesco; Rogers, David; Rimoin, David: Identification of the molecular defect in a family with spondyloepiphyseal dysplasia. p978 26 May 1989.  
 Lee, Gil; Arscott, Patricia G.; Bloomfield, Victor A.; Evans, D. Fennell: Scanning tunneling microscopy of nucleic acids. p475 28 Apr 1989.  
 Lee, Helen; Swanson, Priscilla; Shorty, Vernon S.; Zack, Jerome A.; Rosenblatt, Joseph D.; Chen, Irvin S. Y.: High rate of HTLV-II infection in seropositive IV drug abusers in New Orleans. p471 28 Apr 1989.  
 Lee, P.; Gao, Y.; Sheu, H. S.; Petricek, V.; Restori, R.; Coppens, P.; Darovskikh, A.; Phillips, J. C.; Sleight, A. W.; Subramanian, M. A.: Anomalous scattering study of the Bi distribution in the 2212 superconductor: implications for Cu valency. p62 7 Apr 1989.  
 Lee, Sang Yeol. *See* Rhee, Sue Goo.  
 Lee, W.-S. *See* Kuo, G.  
 Lefort, Anne. *See* Libert, Frédéric.  
 LeMeur, M. *See* Böhme, J.  
 Lenardo, Michael J. *See* Cross, Sharon L.  
 Leonard, Warren J. *See* Cross, Sharon L.  
 Lerner, Richard A. *See* Janda, Kim D.  
 Leslie, Roger J.: review of *Cell Movement*, edited by Fred D. Warner, Peter Satir, and Ian R. Gibbons. p1599 30 June 1989.  
 Levin, Wendy J. *See* Slamon, Dennis J.  
 Levine, Seymour. *See* Shors, Tracey J.  
 Levitan, Irwin B.: The basic defect in cystic fibrosis. p1423 23 June 1989.  
 Levy, Jay A. *See* Homsy, Jacques.  
 Levy, Ronald. *See* Berinstein, Neil.  
 Levy, Shoshana. *See* Berinstein, Neil.  
 Lewin, Roger (news): Biologists disagree over bold signature of nature. p527 5 May 1989. The case of the "misplaced" fossils. p277 21 Apr 1989. DNA typing on the witness stand. p1033 2 June 1989. Genome planners fear avalanche of red tape. p1543 30 June 1989. Global ban sought on ivory trade. p1135 9 June 1989. How to get plants into the conservationists' ark. p32 7 Apr 1989. Invisible evidence? p1140 9 June 1989. Skepticism fades over pre-Clovis man. p1140 9 June 1989. Three-pronged test for DNA. p1035 2 June 1989. What makes bigger brains? p1544 30 June 1989.  
 Li, Ming; McCann, John D.; Anderson, Matthew P.; Clancy, John P.; Liedtke, Carole M.; Nairn, Angus C.; Greengard, Paul; Welsh, Michael J.: Regulation of chloride channels by protein kinase C in normal and cystic fibrosis airway epithelia. p1353 16 June 1989.  
 Libby, Peter. *See* Wilson, James M.  
 Liberman, Alvin M. and Mattingly, Ignatius G.: A specialization for speech perception? (letter). p1530 30 June 1989.  
 Libert, Frédéric; Parmentier, Marc; Lefort, Anne; Dinsart, Christiane; Van Sande, Jacqueline; Maenhaut, Carine; Simons, Marie-Jeanne; Dumont, Jacques E.; Vassart, Gilbert: Selective amplification and cloning of four new members of the G protein-coupled receptor family. p569 5 May 1989.  
 Liedtke, Carole M. *See* Li, Ming.  
 Lindemann, Björn F. *See* Eigen, Manfred.  
 Lindow, S. E.; Panopoulos, N. J.; McFarland, B. L.: Genetic engineering of bacteria from managed and natural habitats. p1300 16 June 1989.  
 Lindsay, S. M.; Thundat, T.; Nagahara, L.; Knipping, U.; Rill, R. L.: Images of the DNA double helix in water. p1063 2 June 1989.  
 Lindsten, Tullia; June, Carl H.; Ledbetter, Jeffrey A.; Stella, Gregory; Thompson, Craig B.: Regulation of lymphokine messenger RNA stability by a surface-mediated T cell activation pathway. p339 21 Apr 1989.  
 Little, Randall D. *See* Brownstein, Bernard H.  
 Livelli, Thomas J. *See* Julius, David.  
 Livingston, Katherine: review of *Algae as Experimental Systems*, edited by Annette W. Coleman, Lynda J. Goff, and Janet R. Stein-Taylor. p592 5 May 1989. review of *Einstein Simplified*, by Sidney Harris. p90 7 Apr 1989. review of *Human Polymorphic Genes*, by Arun K. Roychoudhury and Masatoshi Nei. p592 5 May 1989. review of *Newton's Dream*, edited by Marcia Sweet Stayer. p91 7 Apr 1989. review of *Progress and Opportunities in Southern Hemisphere Optical Astronomy*, edited by V. M. Blanco and M. M. Phillips. p479 28 Apr 1989. review of *Reviews in Modern Astronomy*, edited by Gerhard Klare. p479 28 Apr 1989. review of *Science Off the Pedestal*, by Daryl E. Chubin and Ellen W. Chu. p90 7 Apr 1989. review of *Sex Determination in Mouse and Man*, edited by Anne McLaren and M. A. Ferguson-Smith. p592 5 May 1989.  
 Loer, Curtis M. and Kristan, William B., Jr.: Central synaptic inputs to identified leech neurons determined by peripheral targets. p64 7 Apr 1989.  
 Lofgren, Gary E. *See* Beard, James S.  
 Lohse, Ansgar W.; Mor, Felix; Karin, Nathan; Cohen, Irun R.: Control of experimental autoimmune encephalomyelitis by T cells responding to activated T cells. p820 19 May 1989.  
 Long, Gary W. *See* Hoffman, Stephen L.  
 Longo, Letizia. *See* Dotti, Emilio.  
 Lounasmaa, Olli V. *See* Hari, Riitta.  
 Lu, Hong-Kai. *See* Karwoski, Chester J.  
 Lu, Luo. *See* Hwang, Tzyh-Chang.

Luna, Elizabeth: review of *Molecular Biology of Dictyostelium Development*, edited by Alan R. Kimmel. p1201 9 June 1989.

## M

MacCoun, Robert J.: Experimental research on jury decision-making. p1046 2 June 1989.

Maeda, Hiroshi. See Oda, Tatsuya.

Maenhaut, Carine. See Libert, Frédéric.

Maire, Pascal; Wuarin, Jérôme; Schibler, Ueli: The role of cis-acting promoter elements in tissue-specific albumin gene expression. p343 21 Apr 1989.

Maliga, Pal. See Jones, Jonathan D. G.

Malin, P. E.; Blakeslee, S. N.; Alvarez, M. G.; Martin, A. J.: Microearthquake imaging of the Parkfield asperity. p557 5 May 1989.

Malkiel, Burton G.: The efficient market hypothesis (letter). p1424 23 June 1989.

Mao, H. K. and Hemley, R. J.: Optical studies of hydrogen above 200 gigapascals: evidence for metallization by band overlap. p1462 23 June 1989.

Marban, Eduardo. See Yue, David T.

Marcus, Philip I. See Meegan, James M.

Margolis, Renée K. See Gowda, D. Channe.

Margolis, Richard U. See Gowda, D. Channe.

Marler, Peter. See Nelson, Douglas A.

Marlow, K. W. See Share, G. H.

Marrack, Philippa. See Blackman, Marcia A. See also Kappler, John.

Marschalek, Rolf; Brechner, Thomas; Amon-Böhm, Elfi; Dingermann, Theodor: Transfer RNA genes: landmarks for integration of mobile genetic elements in *Dictyostelium discoideum*. p1493 23 June 1989.

Marshack, Alexander: Ice Age art analysis (letter). p1029 2 June 1989.

Marshall, Eliot (news): Bringing NASA down to earth. p1248 16 June 1989. Clean air? Don't hold your breath. p517 5 May 1989. Early data: losing our memory? p1250 16 June 1989. A fast track for high-risk science. p764 19 May 1989. Low-tech earth observation. p1249 16 June 1989. National Academy panel rejects the case for a mini-space station. p282 21 Apr 1989. The political battle over clean air. p518 5 May 1989. Researchers irked by changes to testimony. p648 12 May 1989. Secret Service probes lab notebooks. p644 12 May 1989. Shuttle rocket plan under fire. p135 14 Apr 1989. Truly in line for NASA post. p24 7 Apr 1989. USGS reports a fraud. p1436 23 June 1989. Valdez: the predicted oil spill. p20 7 Apr 1989. (letter): Space facility. p1030 2 June 1989. See also Sun, Marjorie.

Marshall, Margaret A. See Timberlake, William E.

Martin, A. J. See Malin, P. E.

Marton, L. J. See Milam, K. M.

Marx, Jean L. (news): AIDS drugs—coming but not here. p287 21 Apr 1989. Bone marrow transplants approved. p768 19 May 1989. Gene signals relapse of breast, ovarian cancers. p654 12 May 1989. Grass-roots drug testing. p917 26 May 1989. Hecklers and protesters liven up a dull meeting. p1255 16 June 1989. How cancer cells spread in the body. p147 14 Apr 1989. New hope on the AIDS vaccine front. p1254 16 June 1989. New type of receptor found. p1140 9 June 1989. The trial of conducting AIDS drugs trials. p916 26 May 1989. Two cultures find common ground. p652 12 May 1989.

Mason, James O.: Office of scientific integrity (letter). p903 26 May 1989.

Massey, Richard J. See Paul, Sudhir.

Mathis, D. See Böhme, J.

Mattingly, Ignatius G. See Liberman, Alvin M.

Mayer, Aric; Siegel, Ned R.; Schwartz, Alan L.;

Ciechanover, Aaron: Degradation of proteins with acetylated amino termini by the ubiquitin system. p1480 23 June 1989.

Mayorga, Luis S.; Diaz, Ruben; Stahl, Philip D.: Regulatory role for GTP-binding proteins in endocytosis. p1475 23 June 1989.

McCann, John D. See Li, Ming.

McCay, Bonnie J.: review of *Contaminated Communities*, by Michael R. Edelman. p478 28 Apr 1989.

McCluskey, Robert T. See Raychowdhury, Raktima.

McElroy, William D. See Wood, Keith V.

McFarland, B. L. See Lindow, S. E.

McKenna, Malcolm C.: review of *Possums and Opossums*, edited by Michael Archer. p1096 2 June 1989.

McMurry, Thomas J.; Raymond, Kenneth N.; Smith, Paul H.: Molecular recognition and metal ion template synthesis. p938 26 May 1989.

McNaughton, Bruce L. See Foster, Tom C.

McNeil, Jeremy N. See Brodeur, Jacques.

McSwiggen, James A. and Cech, Thomas R.: Stereochemistry of RNA cleavage by the *Tetrahymena* ribozyme and evidence that the chemical step is not rate-limiting. p679 12 May 1989.

Mechanic, David: review of *In Sickness and in Wealth*, by Rosemary Stevens. p1385 16 June 1989.

Meegan, James M. and Marcus, Philip I.: Double-stranded ribonuclease coinduced with interferon. p1089 2 June 1989.

Mellman, Ira: review of *Lysosomes*, by Eric Holtzman. p853 19 May 1989.

Melton, D. A. See Whitman, Malcolm.

Melvin, James E. See Foskett, J. Kevin.

Mencarelli, Amedea. See Donti, Emilio.

Menon, Anil G. See Fountain, Jane W.

Menozi, P. See Cavalli-Sforza, L.

Messina, D. C. See Share, G. H.

Metzger, Henry. See Miller, Larry.

Metzger, Walter P.: review of *Stalking the Academic Communist*, by David R. Holmes. p1200 9 June 1989.

Meyer, Mia. See Homsy, Jacques.

Mezger, K. See Bohlen, S. R.

Michael, R. T. See Laumann, E. O.

Michaels, S. See Laumann, E. O.

Michels, Virginia V. See Fountain, Jane W.

Milam, K. M.; Horn, S.; Tofilon, P. J.; Deen, D. F.; Marton, L. J.: Retraction (letter). p631 12 May 1989.

Millan, Monica A.; Carvallo, Pilar; Izumi, Shun-ichiro; Zemel, Sharon; Catt, Kevin J.; Aguilera, Greti: Novel sites of expression of functional angiotensin II receptors in the late gestation fetus. p1340 16 June 1989.

Miller, Carl W.; Rovera, Giovanni; Venturelli, Donatella; Huebner, Kay F.; van Tuinen, Peter; Ledbetter, David H.; Kitchingman, Geofrey; Mirro, Joseph; Koeffler, H. Phillip: The myeloperoxidase gene in acute promyelocytic leukemia (technical comment). p823 19 May 1989.

Miller, Kurt F. See Pursel, Vernon G.

Miller, Larry; Blank, Ulrich; Metzger, Henry; Kinet, Jean-Pierre: Expression of high-affinity binding of human immunoglobulin E by transfected cells. p334 21 Apr 1989.

Miller, Teresa Y. See Carter, Daniel C.

Miller, Terry A. See Boyd, R. N.

Minamoto, Seiji. See Hatakeyama, Masanori.

Mirro, Joseph. See Miller, Carl W.

Mischel, Walter; Shoda, Yuichi; Rodriguez, Monica L.: Delay of gratification in children. p933 26 May 1989.

Miyamura, T. See Kuo, G.

Miyasaka, Masayuki. See Hatakeyama, Masanori.

Miyata, Takashi. See Hatakeyama, Masanori.

Mizes, H. A. and Foster, J. S.: Long-range electronic perturbations caused by defects using scanning tunneling microscopy. p559 5 May 1989.

Mollick, Joseph A.; Cook, Richard G.; Rich, Robert R.: Class II MHC molecules are specific receptors for staphylococcus enterotoxin A. p817 19 May 1989.

Montanucci, Manuela. See Donti, Emilio.

Moore, David D. See Hodin, Richard A.

Moore, Thomas A. See Gust, Devens.

Moorman, Thomas: Scientific decision-making in school (letter). p11 7 Apr 1989.

Mor, Felix. See Lohse, Ansgar W.

Morad, Martin. See Nábauer, Michael.

Moraes, Carlos T. See Schon, Eric A.

Morgan, John W. See Lambert, David D.

Morrill, Calvin: review of *Moral Mazes*, by Robert Jackall. p836 19 May 1989.

Morse, Stearns A.: review of *Continental Flood Basalts*, edited by J. D. Macdougall. p721 12 May 1989.

Moss, S. C.: Retraction (letter). p1029 2 June 1989.

Moulins, Maurice. See Hooper, Scott L.

Mountian, J. See Cavalli-Sforza, L.

Mukhopadhyay, Amitabha; Chaudhuri, Gautam; Arora, Sunil K.; Sehgal, Shobha; Basu, Sandip K.: Receptor-mediated drug delivery to macrophages in chemotherapy of leishmaniasis. p705 12 May 1989.

Mulligan, Richard C. See Wilson, James M.

Munson, Sibyl H. See Carter, Daniel C.

## N-O

Naaman, R. See Vager, Z.

Nábauer, Michael; Callewaert, Geert; Cleemann, Lars; Morad, Martin: Regulation of calcium release is gated by calcium current, not gating charge, in cardiac myocytes. p800 19 May 1989.

Nabel, Elizabeth G.; Plautz, Gregory; Boyce, Frederick M.; Stanley, James C.; Nabel, Gary J.: Recombinant gene expression *in vivo* within endothelial cells of the arterial wall. p1342 16 June 1989.

Nabel, Gary J. See Nabel, Elizabeth G.

Nagahara, L. See Lindsay, S. M.

Nagawa, Fumikiyo. See Yoshimatsu, Tadanori.

Nairn, Angus C. See Li, Ming.

Nakamura, Yusuke. See Baker, Suzanne J. See also Vogelstein, Bert.

Nakase, Hirofumi. See Schon, Eric A.

Nanni, Mauro. See Donti, Emilio.

Nash, Douglas B. and Howell, Robert R.: Hydrogen sulfide on Io: evidence from telescopic and laboratory infrared spectra. p454 28 Apr 1989.

Nassichuk, Walter W. See Beauchamp, Benoit.

Nawrot, Mark and Blake, Randolph: Neural integration of information specifying structure from stereopsis and motion. p716 12 May 1989.

Neale, Elaine A. See Nelson, Phillip G.

Nealson, Kenneth H.: review of *Microbial Mats*, edited by Yehuda Cohen and Eugene Rosenberg. p1095 2 June 1989.

Nelson, Douglas A. and Marler, Peter: Categorical perception of a natural stimulus continuum: birdsong. p976 26 May 1989.

Nelson, Phillip G.; Yu, Chang; Fields, R. Douglas; Neale, Elaine A.: Synaptic connections *in vitro*: modulation of number and efficacy by electrical activity. p585 5 May 1989.

Newman, Eric A. See Karwoski, Chester J.

Newton, Salet M. C.; Jacob, Chaim O.; Stocker, Bruce A. D.: Immune response to cholera toxin epitope inserted in *Salmonella* flagellin. p70 7 Apr 1989.

- Nicoll, Charles S. and Russell, Sharon M.: Animal rights literature (letter). p903 26 May 1989.
- Nigro, Janice M. See Baker, Suzanne J.
- Nilakantan, Ramaswamy. See Zein, Nada.
- Niles, John L. See Raychowdhury, Raktima.
- Nilles, Laura A. See Weil, Susan C.
- Nobili, Anna M. and Burns, Joseph A.: Solar system chaos (letter). p1425 23 June 1989.
- Noller, Harry F. See Stern, Seth.
- Nordby, Knut. See Sharpe, Lindsay T.
- Noren, Christopher J.; Anthony-Cahill, Spencer J.; Griffith, Michael C.; Schultz, Peter G.: A general method for site-specific incorporation of unnatural amino acids into proteins. p182 14 Apr 1989.
- Norman, Colin (news): Consorting on superconductors. p1037 2 June 1989. A focus on advanced television? p137 14 Apr 1989. Gramrudman avoided, for now. p281 21 Apr 1989. HDTV: the technology *du Jour*. p761 19 May 1989. Inaction on technology programs stirs Congress. p137 14 Apr 1989. Koop resigns in a huff. p649 12 May 1989. Navy relents in battle over mapping sea floor. p25 7 Apr 1989. NIH, CDC search committees formed. p1135 9 June 1989. Telescope collapse unraveled. p29 7 Apr 1989. U.S. physicians probe deaths in Soviet Georgia. p1133 9 June 1989. Without standards, U.S. HDTV lacks definition. p762 19 May 1989.
- North, R. Alan. See Christie, Macdonald J.
- Northcutt, R. Glenn: review of *Body and Brain*, by Dale Purves. p993 26 May 1989.
- O'Connell, Peter; Leach, Robin; Cawthon, Richard M.; Culver, Melanie; Stevens, Jeffrey; Viskochil, David; Fournier, R. E. Keith; Rich, Donna C.; Ledbetter, David H.; White, Ray: Two NF1 translocations map within a 600-kilobase segment of 17q11.2. p1087 2 June 1989.
- O'Connor, Michael; Peifer, Mark; Bender, Welcome: Construction of large DNA segments in *Escherichia coli*. p1307 16 June 1989.
- Oda, Tatsuya; Akaike, Takaaki; Hamamoto, Takayoshi; Suzuki, Fujio; Hirano, Takashi; Maeda, Hiroshi: Oxygen radicals in influenza-induced pathogenesis and treatment with pyran polymer-conjugated SOD. p974 26 May 1989.
- Olney, John W.; Labruyere, Joann; Price, Madelon T.: Pathological changes induced in cerebrocortical neurons by phencyclidine and related drugs. p1360 16 June 1989.
- Olson, Maynard V. See Brownstein, Bernard H.
- O'Neill, Terrence J.; Kerrick, Alan D.; Ait-Ouamer, Farid; Tumer, O. Tumay; Zych, Allen D.; White, R. Stephen: Observations of nuclear reactors on satellites with a balloon-borne gamma-ray telescope. p451 28 Apr 1989.
- O'Neill, William L.: review of *The Rights of Nature*, by Roderick Frazier Nash. p834 19 May 1989.
- Ordway, Richard W.; Walsh, John V., Jr.; Singer, Joshua J.: Arachidonic acid and other fatty acids directly activate potassium channels in smooth muscle cells. p1176 9 June 1989.
- Orenstein, Jan M. See Poli, Guido.
- Orentas, Rimas J. See Hildreth, James E. K.
- Orth, Kim. See Krupinski, John.
- O'Toole, Margot: The Dingell investigation (letter). p1243 16 June 1989.
- Overby, L. R. See Kuo, G.
- Overby, Lacy R. See Choo, Qui-Lim.
- Özbal, Hadi. See Yener, K. Aslihan.
- body weight among mammals. p1589 30 June 1989.
- Palca, Joseph (news): Sun dagger misses mark. p1538 30 June 1989.
- Palmiter, Richard D. See Pursel, Vernon G.
- Pandolfi, Pierpaolo. See Donti, Emilio.
- Panopoulos, N. J. See Lindow, S. E.
- Panter, S. Scott. See Faden, Alan I.
- Papay, Lawrence T.: Accelerator production of tritium (letter). p275 21 Apr 1989.
- Pardoll, Drew M. See Janis, Eric M.
- Parmentier, Marc. See Libert, Frédéric.
- Paul, Sudhir; Volle, Deanna J.; Beach, Carol M.; Johnson, Donald R.; Powell, Michael J.; Massey, Richard J.: Catalytic hydrolysis of vasoactive intestinal peptide by human autoantibody. p1158 9 June 1989.
- Pauly, Philip J.: review of *The Politics of Philanthropy*, by Steven C. Wheatley and *The Circuit Riders*, by Gerald Jonas. p832 19 May 1989.
- Peak, Meyrick J.: Budget cuts at NIH (letter). p631 12 May 1989.
- Pegoraro, Luigi. See Donti, Emilio.
- Pehlivan, A. Necip. See Yener, K. Aslihan.
- Peifer, Mark. See O'Connor, Michael.
- Pellici, Pier Giuseppe. See Donti, Emilio.
- Peltier, W. R. and Tushingham, A. M.: Global sea level rise and the greenhouse effect: might they be connected? p806 19 May 1989.
- Pennefather, Peter S. See Goh, Joanne W.
- Penzias, Arno: Teaching statistics to engineers (editorial). p1025 2 June 1989.
- Perry, Robert J. See Boyd, R. N.
- Peterson, William H. See Barron, Eric J.
- Petricek, V. See Lee, P.
- Phillips, J. C. See Lee, P.
- Phinney, E. S.: review of *Astrophysics of Gaseous Nebulae and Active Galactic Nuclei*, by Donald E. Osterbrock. p1095 2 June 1989.
- Piazza, A. See Cavalli-Sforza, L.
- Picciafuoco, Silvia. See Bosch, Marnix L.
- Pinkert, Carl A. See Pursel, Vernon G.
- Plautz, Gregory. See Nabel, Elizabeth G.
- Poli, Guido; Orenstein, Jan M.; Kinter, Audrey; Folks, Thomas M.; Fauci, Anthony S.: Interferon- $\alpha$  but not AZT suppresses HIV expression in chronically infected cell lines. p575 5 May 1989.
- Pollack, Robert E. See Chen, Suzie.
- Poncin, Marc. See Zein, Nada.
- Pool, Robert (news): Bulls outpace bears—for now! p421 28 Apr 1989. Can you help the Mets by watching on TV? p773 19 May 1989. Cold fusion: bait and switch? p774 19 May 1989. Cold fusion: end of Act I. p1039 2 June 1989. Confirmations heat up cold fusion prospects. p143 14 Apr 1989. Fusion followup: confusion abounds. p27 7 Apr 1989. Fusion theories pro and con. p285 21 Apr 1989. How cold fusion happened—twice! p420 28 Apr 1989. Illuminating jet lag. p1256 16 June 1989. Is it real, or is it Cray? p1438 23 June 1989. Putting the squeeze on hydrogen. p1440 23 June 1989. Skepticism grows over cold fusion. p284 21 Apr 1989. Superconductivity: is the party over? p914 26 May 1989. Superconductivity stars move. p1141 9 June 1989. "Utah effect" strikes again? p420 28 Apr 1989. — and Crawford, Mark (news): Giants haven't given up on superconductivity. p915 26 May 1989.
- Pool, Robert and Heppenheimer, T. A. (news): Electrochemists fail to heat up cold fusion. p647 12 May 1989.
- Posnett, David N. See Kappler, John.
- Powell, Michael J. See Paul, Sudhir.
- Powers, Ted. See Stern, Seth.
- Preisinger, Ann C. See Baker, Suzanne J. See also Vogelstein, Bert.
- Prescott, William H.; Davis, James L.; Svarc, Jerry L.: Global positioning system measurements for crustal deformation: precision and accuracy. p1337 16 June 1989.
- Press, Michael F. See Slamon, Dennis J.
- Price, Madelon T. See Olney, John W.
- Primack, Joel R.: Gamma-ray observations of orbiting nuclear reactors. p407 28 Apr 1989.
- Prpic, Veronica; Yu, Sheau-Fung; Figueiredo, Florencio; Hollenbach, Paul W.; Gawdi, Gowind; Herman, Brian; Uhing, Ronald J.; Adams, Dolph O.: Role of Na<sup>+</sup>/H<sup>+</sup> exchange by interferon- $\gamma$  in enhanced expression of JE and I-A $\beta$  genes. p469 28 Apr 1989.
- Purcell, R. H. See Kuo, G.
- Pursel, Vernon G.; Pinkert, Carl A.; Miller, Kurt F.; Bolt, Douglas J.; Campbell, Roger G.; Palmiter, Richard D.; Brinster, Ralph L.; Hammer, Robert E.: Genetic engineering of livestock. p1281 16 June 1989.
- Pursell, Carroll: review of *Nuts and Bolts of the Past*, by David Freeman Hawke. p720 12 May 1989.
- Raina, A. K.; Jaffe, H.; Kempe, T. G.; Keim, P.; Blacher, R. W.; Fales, H. M.; Riley, C. T.; Klun, J. A.; Ridgway, R. L.; Hayes, D. K.: Identification of a neuropeptide hormone that regulates sex pheromone production in female moths. p796 19 May 1989.
- Rajagopal, Jayaraj; Doudna, Jennifer A.; Szostak, Jack W.: Stereochemical course of catalysis by the *Tetrahymena* ribozyme. p692 12 May 1989.
- Ralston, Evelyn and Hall, Zach W.: Transfer of a protein encoded by a single nucleus to nearby nuclei in multinucleated myotubes. p1066 2 June 1989.
- Ramanathan, K. G.: review of *Journey into Light*, by G. Venkataraman. p848 19 May 1989.
- Ramirez, Francesco. See Lee, Brendan.
- Ramos, Alcida Rita. See Albert, Bruce.
- Rando, Robert R. See Deigner, Peter S.
- Rao, Veena N.; Huebner, Kay; Isobe, Masaharu; ar-Rushdi, Abbas; Croce, Carlo M.; Reddy, E. Shyam P.: *elk*, tissue-specific *ets*-related genes on chromosomes X and 14 near translocation breakpoints. p66 7 Apr 1989.
- Ray, Clayton E. See Berta, Annalisa.
- Raychowdhury, Raktima; Niles, John L.; McCluskey, Robert T.; Smith, John A.: Auto-immune target in Heymann nephritis is a glycoprotein with homology to the LDL receptor. p1163 9 June 1989.
- Raymond, Kenneth N. See McMurry, Thomas J.
- Reddy, E. Shyam P. See Rao, Veena N.
- Redeker, A. G. See Kuo, G.
- Redhead, Christopher. See Landry, Donald W.
- Reed, James: review of *Mechanical Man*, by Kerry W. Buckley. p1386 16 June 1989.
- Reed, Randall R. See Jones, David T. See also Krupinski, John.
- Reid, Martha S. See Weil, Susan C.
- Reppin, Claus. See Rieger, Erich.
- Restori, R. See Lee, P.
- Rhee, Sue Goo; Suh, Pann-Ghill; Ryu, Sung-Ho; Lee, Sang Yeol: Studies of inositol phospholipid-specific phospholipase C. p546 5 May 1989.
- Rich, Donna C. See O'Connell, Peter.
- Rich, Robert R. See Mollick, Joseph A.
- Ridgway, R. L. See Raina, A. K.
- Rieger, Erich; Vestrand, W. Thomas; Forrest, David J.; Chupp, Edward L.; Kanbach, Gottfried; Reppin, Claus: Man-made transients observed by the gamma-ray spectrometer on the solar maximum mission satellite. p441 28 Apr 1989.
- Riley, C. T. See Raina, A. K.
- Rill, R. L. See Lindsay, S. M.
- Rimoin, David. See Lee, Brendan.
- Rine, Jasper and Kenyon, Cynthia: review of *The Nematode Caenorhabditis elegans*, edited by

## P-R

- Pace, Norman R. See Waugh, David S.
- Pagel, Mark D. and Harvey, Paul H.: Taxonomic differences in the scaling of brain on

- William B. Wood *et al.* p235 14 Apr 1989.
- Rissler, Jane: Biotechnology regulation (letter). p276 21 Apr 1989.
- Rizzuto, Rosario. *See* Schon, Eric A.
- Roberts, Leslie (news): Does the ozone hole threaten Antarctic life? p288 21 Apr 1989. Genome mapping goal now in reach. p424 28 Apr 1989. The legacy of past spills. p23 7 Apr 1989. Long, slow recovery predicted for Alaska. p22 7 Apr 1989. Mapping by color and x-rays. p425 28 Apr 1989. New chip may speed genome analysis. p655 12 May 1989. (letter): Alar and apples. p515 5 May 1989.
- Rodriguez, Monica L. *See* Mischel, Walter.
- Rogers, David. *See* Lee, Brendan.
- Rogers, Naomi: review of *Mothers and Medicine*, by Rima D. Apple. p843 19 May 1989.
- Ronda, Joseph M. *See* Czeisler, Charles A.
- Rose, Richard J.: review of *Nature and Nurture during Infancy and Early Childhood*, by Robert Plomin, John C. DeFries, and David W. Fulker. p845 19 May 1989.
- Rosen, Barry S.; Cook, Kathleen S.; Yaglom, Julia; Groves, Douglas L.; Volanakis, John E.; Damm, Deborah; White, Tyler; Spiegelman, Bruce M.: Adiposin and complement factor D activity: an immune-related defect in obesity. p1483 23 June 1989.
- Rosen, Deborah A.: Animals in the laboratory (letter). p409 28 Apr 1989.
- Rosenblatt, Joseph D. *See* Lee, Helen.
- Rosenfeld, John L. *See* Christensen, John N.
- Rosner, Gayle L. *See* Weil, Susan C.
- Ross, Marc: Improving the efficiency of electricity use in manufacturing. p311 21 Apr 1989.
- Rossant, Janet. *See* Gossler, Achim.
- Rouault, Tracey A. *See* Hentze, Matthias W.
- Rovera, Giovanni. *See* Miller, Carl W.
- Roy, Syamal; Scherer, Mark T.; Briner, Thomas J.; Smith, John A.; Gefter, Malcolm L.: Murine MHC polymorphism and T cell specificities. p572 5 May 1989.
- Russell, Sharon M. *See* Nicoll, Charles S.
- Ryder-Cook, Allan S. *See* Scinski, Piotr.
- Ryu, Sung-Ho. *See* Rhee, Sue Goo.
- tein precursor to heparan sulfate proteoglycans (technical comment). p827 19 May 1989.
- Schubert, Gerald. *See* Bercovici, Dave.
- Schultz, Peter G. *See* Noren, Christopher J.
- Schulze, E.-D.: Air pollution and forest decline in a spruce (*Picea abies*) forest. p776 19 May 1989.
- Schwartz, Alan L. *See* Mayer, Arie.
- Schwartz, Alan W. *See* Visscher, J.
- Schwartz, Ronald H. *See* Janis, Eric M.
- Schwartz, Stephen E.: Acid rain models (letter). p127 14 Apr 1989.
- Schwartz, William A. and Derber, Charles: review of *Minds at War*, by Steven Kull. p89 7 Apr 1989.
- Schwarz, Richard H.: Animal research: a position statement (letter). p1128 9 June 1989.
- Sedegah, Martha. *See* Hoffman, Stephen L.
- Sedjo, Roger A.: Climate and forests (letter). p631 12 May 1989.
- Schgal, Shobha. *See* Mukhopadhyay, Amitabha.
- Seib, Thomas B. *See* Shors, Tracey J.
- Seizinger, Bernd R. *See* Fountain, Jane W.
- Sekharudu, Y. C. *See* Sundaralingam, M.
- Seliger, Howard H. *See* Wood, Keith V.
- Selker, Eric U. *See* Cambareri, Edward B.
- Serrano, Adelfa E. *See* Wilson, Craig M.
- Shankar, Anuraj H. *See* Wilson, Craig M.
- Share, G. H.; Kurfess, J. D.; Marlow, K. W.; Messina, D. C.: Geomagnetic origin for transient particle events from nuclear reactor-powered satellites. p444 28 Apr 1989.
- Sharpe, Lindsay T.; Fach, Clemens; Nordby, Knut; Stockman, Andrew: The incremental threshold of the rod visual system and Weber's law. p354 21 Apr 1989.
- Sheu, H. S. *See* Lee, P.
- Shirey, Steven B. *See* Lambert, David D.
- Shoda, Yuichi. *See* Mischel, Walter.
- Shors, Tracey J.; Seib, Thomas B.; Levine, Seymour; Thompson, Richard F.: Inescapable versus escapable shock modulates long-term potentiation in the rat hippocampus. p224 14 Apr 1989.
- Shorty, Vernon S. *See* Lee, Helen.
- Shuster, J. R. *See* Kuo, G.
- Scinski, Piotr; Geng, Yan; Ryder-Cook, Allan S.; Barnard, Eric A.; Darlison, Mark G.; Barnard, Pene J.: The molecular basis of muscular dystrophy in the *mdx* mouse: a point mutation. p1578 30 June 1989.
- Siegel, Bruce A. and Verbeke, Judith A.: Diffusible factors essential for epidermal cell redifferentiation in *Catharanthus roseus*. p580 5 May 1989.
- Siegel, Ned R. *See* Mayer, Arie.
- Siekevitz, Miriam. *See* Hoyos, Beatrice.
- Sigworth, Frederick J. *See* Stankovic, Charles J.
- Silverman, Gary A. *See* Brownstein, Bernard H.
- Simola, Kalle O. J. *See* Gessler, Manfred.
- Simon, Melvin I. *See* Gautam, Narasimhan.
- Simons, Marie-Jeanne. *See* Libert, Frédéric.
- Sinclair, Bruce: review of *Inventing Canada*, by Suzanne Zeller. p833 19 May 1989.
- Singer, Joshua J. *See* Becker, Peter L. *See also* Ordway, Richard W.
- Skarnes, William C. *See* Gossler, Achim.
- Slamon, Dennis J.; Godolphin, William; Jones, Lovell A.; Holt, John A.; Wong, Steven G.; Keith, Duane E.; Levin, Wendy J.; Stuart, Susan G.; Udove, Judy; Ullrich, Axel; Press, Michael F.: Studies of the HER-2/*neu* proto-oncogene in human breast and ovarian cancer. p707 12 May 1989.
- Slaughter, Clive. *See* Krupinski, John.
- Sleight, A. W. *See* Lee, P.
- Smith, John A. *See* Raychowdhury, Raktima. *See also* Roy, Syamal.
- Smith, Paul H. *See* McMurry, Thomas J.
- Smith, Steven O.; Farr-Jones, Shauna; Griffin, Robert G.; Bachovchin, William W.: Crystal versus solution structures of enzymes: NMR spectroscopy of a crystalline serine protease. p961 26 May 1989.
- Solter, Davor. *See* Fox, Niles.
- Sommer, Steve S. *See* Sarkar, Gobinda.
- Sonnenfeld, Peter: review of *Evaporite Sedimentology*, by John K. Warren and *Evaporites and Hydrocarbons*, edited by B. Charlotte Schrieber. p721 12 May 1989.
- Spekreijse, Henk. *See* van den Enden, Aad.
- Spiegelman, Bruce M. *See* Rosen, Barry S.
- Stahl, Philip D. *See* Mayorga, Luis S.
- Stankovic, Charles J.; Heinemann, Stefan H.; Delfino, Jose M.; Sigworth, Frederick J.; Schrieber, Stuart L.: Transmembrane channels based on tartaric acid-gramicidin A hybrids. p813 19 May 1989.
- Stanley, George D., Jr.: review of *Gondwana and Tethys*, edited by M. G. Audley-Charles and A. Hallam. p1597 30 June 1989.
- Stanley, James C. *See* Nabel, Elizabeth G.
- Stecha, P. *See* Böhme, J.
- Steinberg, Meyer: Accelerator production of tritium (letter). p275 21 Apr 1989.
- Stella, Gregory. *See* Lindsten, Tullia.
- Stern, Seth; Powers, Ted; Changchien, Li-Ming; Noller, Harry F.: RNA-protein interactions in 30S ribosomal subunits: folding and function of 16S rRNA. p783 19 May 1989.
- Stevens, C. E. *See* Kuo, G.
- Stevens, Jeffrey. *See* O'Connell, Peter.
- Stigler, George J.: review of *The Consequences of Economic Rhetoric*, edited by Arjo Klammer, Donald N. McCloskey, and Robert M. Solow. p839 19 May 1989.
- Stocker, Bruce A. D. *See* Newton, Salet M. C.
- Stockman, Andrew. *See* Sharpe, Lindsay T.
- Strober, Myra H.: review of *Wage Justice*, by Sara M. Evans and Barbara J. Nelson. p838 19 May 1989.
- Strohman, R. C. *See* DiMario, J.
- Strominger, Jack L.: Developmental biology of T cell receptors. p943 26 May 1989.
- Stuart, George E.: review of *A Dream of Maya*, by Lawrence Gustave Desmond and Phyllis Mauch Messenger. p864 19 May 1989.
- Stuart, Susan G. *See* Slamon, Dennis J.
- Stumpf, Paul K.: Agricultural research initiative (letter). p1029 2 June 1989.
- Stutts, M. Jackson. *See* Jetten, Anton M.
- Subramanian, M. A. *See* Lee, P.
- Suh, Pann-Ghill. *See* Rhee, Sue Goo.
- Sun, Marjorie (news): Fang Lizhi: speaking out for human rights. p417 28 Apr 1989. Fighting the bends in the Indian Ocean. p1134 9 June 1989. Following the Royal Society's lead. p910 26 May 1989. Peer review comes under peer review. p910 26 May 1989. Setting the record straight. p911 26 May 1989. South Carolina blocks test of rabies vaccine. p1535 30 June 1989. Support offered for Fang Lizhi. p1435 23 June 1989. U.S.-Chinese scientists see dreams imperiled. p1131 9 June 1989. — and Marshall, Eliot (news): China's turmoil touches U.S. science. p1130 9 June 1989.
- Sundaralingam, M. and Sekharudu, Y. C.: Water-inserted  $\alpha$ -helical segments implicate reverse turns as folding intermediates. p1333 16 June 1989.
- Suslow, Valerie Y.: review of *From Monopoly to Competition*, by George David Smith. p841 19 May 1989.
- Susman, Randall L.: review of *Orang-utan Biology*, edited by Jeffrey H. Schwartz. p859 19 May 1989.
- Sutter, J. F. *See* Kunk, M. J.
- Suzuki, Fujio. *See* Oda, Tatsuya.
- Svarc, Jerry L. *See* Prescott, William H.
- Swann, John P.: review of *Science and Corporate*

## S

- Salomon, Robert N. *See* Wilson, James M.
- Sarkar, Gobinda and Sommer, Steve S.: Access to a messenger RNA sequence or its protein product is not limited by tissue or species specificity. p331 21 Apr 1989.
- Sastry, Kandula S. R.: Fusion reaction (letter). p904 26 May 1989.
- Saykally, R. J. *See* Heath, J. R.
- Schabtach, Eric. *See* Cambareri, Edward B.
- Scharff, Matthew D. *See* French, Deborah L.
- Scherer, Mark T. *See* Roy, Syamal.
- Schibler, Ueli. *See* Fox, Niles. *See also* Maire, Pascal.
- Schlessinger, David. *See* Brownstein, Bernard H.
- Schmandt, Jurgen: review of *The Acid Rain Controversy*, by James L. Regens and Robert W. Rycroft. p234 14 Apr 1989.
- Schmidt, Michael A. *See* Fountain, Jane W.
- Schmittenmaer, C. A. *See* Heath, J. R.
- Schneider, Jill E. and Wade, George N.: Availability of metabolic fuels controls estrous cyclicity of Syrian hamsters. p1326 16 June 1989.
- Scholer, M. *See* Terasawa, T.
- Schon, Eric A.; Rizzuto, Rosario; Moraes, Carlos T.; Nakase, Hirofumi; Zeviani, Massimo; DiMauro, Salvatore: A direct repeat is a hotspot for large-scale deletion of human mitochondrial DNA. p346 21 Apr 1989.
- Schrieber, Stuart L. *See* Stankovic, Charles J.
- Schreier, Ethan J.: Hubble Space Telescope operations system (letter). p409 28 Apr 1989.
- Schubert, David: Relation of the amyloid  $\beta$  pro-

*Strategy*, David A. Hounshell and John Kenly Smith, Jr. p840 19 May 1989.  
Swanson, Maurice S. See Weil, Susan C.  
Swanson, Priscilla. See Lee, Helen.  
Szarfman, Ana. See Hoffman, Stephen L.  
Szostak, Jack W. See Rajagopal, Jayaraj.

## T

Tabilio, Antonio. See Donti, Emilio.  
Takahashi, K. See Boyd, R. N.  
Tang, Wei-Jen. See Krupinski, John.  
Taniguchi, Tadatsugu. See Hatakeyama, Masanori.  
Tateno, Masatoshi. See Homsy, Jacques.  
Taylor, John J.: Improved and safer nuclear power. p318 21 Apr 1989.  
Tegtmeier, G. E. See Kuo, G.  
Teicher, Luz C. See Chen, Suzie.  
Terasawa, T. and Scholer, M.: The heliosphere as an astrophysical laboratory for particle acceleration. p1050 2 June 1989.  
Thompson, Craig B. See Lindsten, Tullia.  
Thompson, John M.: review of *Novel Aspects of Insect-Plant Interactions*, edited by Pedro Barbosa and Deborah K. Letourneau. p1498 23 June 1989.  
Thompson, Richard F. See Shors, Tracey J.  
Thundat, T. See Lindsay, S. M.  
Thunnissen, Marjolein M. G. M. See Kuipers, Oscar P.  
Tidor, Bruce. See Gao, Jiali.  
Tietze, Manfred. See Eigen, Manfred.  
Timberlake, William E. and Marshall, Margaret A.: Genetic engineering of filamentous fungi. p1313 16 June 1989.  
Tofilon, P. J. See Milam, K. M.  
Towne, William F. and Kirchner, Wolfgang H.: Hearing in honey bees: detection of air-particle oscillations. p686 12 May 1989.  
Tsudo, Mitsuru. See Hatakeyama, Masanori.  
Turner, O. Tumay. See O'Neill, Terrence J.  
Turcotte, Donald L.: review of *Geophysical Geodesy*, by Kurt Lambeck. p995 26 May 1989.  
Tushingham, A. M. See Peltier, W. R.  
Twigg, Pamela D. See Carter, Daniel C.

## U-V

Udove, Judy. See Slamon, Dennis J.  
Uhing, Ronald J. See Prpic, Veronica.  
Ullrich, Axel. See Slamon, Dennis J.  
Ullrich, Stephen J. See Guy, Rina.  
Vager, Z; Naaman, R.; Kanter, E. P.: Coulomb explosion imaging of small molecules. p426 28 Apr 1989.  
van den Enden, Aad and Spekrijse, Henk: Binocular depth reversals despite familiarity cues. p959 26 May 1989.  
van der Meide, Peter H. See Hoffman, Stephen L.  
van der Woerd, R. See Visscher, J.  
van Ewijk, W. See Böhme, J.  
Van Sande, Jacqueline. See Libert, Frédéric.  
van Tuinen, Peter. See Baker, Suzanne J. See also Miller, Carl W.  
Vassart, Gilbert. See Libert, Frédéric.  
Venturelli, Donatella. See Miller, Carl W.  
Verbeke, Judith A. See Siegel, Bruce A.  
Verheij, Hubertus M. See Kuipers, Oscar P.  
Vestrand, W. Thomas. See Rieger, Erich.  
Vink, Robert. See Faden, Alan I.  
Viskochil, David. See O'Connell, Peter.  
Visscher, J.; Bakker, C. G.; van der Woerd, R.; Schwartz, Alan W.: Template-directed oligomerization catalyzed by a polynucleotide analog. p329 21 Apr 1989.  
Vissing, Henrik. See Lee, Brendan.  
Vogelstein, Bert. See Baker, Suzanne J.

—; Fearon, Eric R.; Kern, Scott E.; Hamilton, Stanley R.; Preisinger, Ann C.; Nakamura, Yusuke; White, Ray: Allelotype of colorectal carcinomas. p207 14 Apr 1989.  
Volanakis, John E. See Rosen, Barry S.  
Volle, Deanna J. See Paul, Sudhir.  
von Haeseler, Arndt. See Eigen, Manfred.

## W

Wachs, Martin: U.S. transit subsidy policy: in need of reform. p1545 30 June 1989.  
Wade, George N. See Schneider, Jill E.  
Wade, Richard A.: review of *Critical Observations versus Physical Models for Close Binary Systems*, edited by Kam-Ching Leung. p994 26 May 1989.  
Waldrop, M. Mitchell (news): AI is the able assistant. p1045 2 June 1989. Cold water from Caltech. p523 5 May 1989. Flying the electric skies. p1532 30 June 1989. Gazing into the interior of the sun. p31 7 Apr 1989. NASA flight controllers become AI pioneers. p1044 2 June 1989. PARC brings Adam Smith to computing. p145 14 Apr 1989. SLAC feels the thrill of the chase. p771 19 May 1989. Space council backs Landsat. p767 19 May 1989. Space science on the rebound? p525 5 May 1989. Space telescope delayed (again). p912 26 May 1989. The unveiling of Venus. p526 5 May 1989. Who's minding the cockpit? p1533 30 June 1989.  
Walker, Richard J. See Lambert, David D.  
Wallace, Margaret R. See Fountain, Jane W.  
Walsh, John V., Jr. See Becker, Peter L. See also Ordway, Richard W.  
Wasley, Annemarie. See Wilson, Craig M.  
Waters, Leslie. See Hoffman, Stephen L.  
Waugh, David S.; Green, Christopher J.; Pace, Norman R.: The design and catalytic properties of a simplified ribonuclease P RNA. p1569 30 June 1989.  
Weil, Susan C.; Reid, Martha S.; Nilles, Laura A.; Chisholm, Rex L.; Rosner, Gayle L.; Swanson, Maurice S.; Carrino, John J.; Diaz, Manuel O.; Le Beau, Michelle M.: The myeloperoxidase gene in acute promyelocytic leukemia (technical comment). p825 19 May 1989.  
Weiner, Amy J. See Choo, Qui-Lim.  
Weisbrod, Burton A.: Rewarding performance that is hard to measure: the private nonprofit sector. p541 5 May 1989.  
Wells, James A. See Cunningham, Brian C.  
Welsh, Michael J. See Li, Ming.  
Werblin, Frank. See Firestein, Stuart.  
White, Marge: 1989 Council meeting (AAAS). p86 7 Apr 1989.  
White, R. Stephen. See O'Neill, Terrence J.  
White, Ray. See Baker, Suzanne J. See also O'Connell, Peter. See also Vogelstein, Bert.  
White, Tyler. See Rosen, Barry S.  
Whitman, Malcolm and Melton, D. A.: Induction of mesoderm by a viral oncogene in early *Xenopus* embryos. p803 19 May 1989.  
Whitman, Thomas G.: Plant hybrid zones as sinks for pests. p1490 23 June 1989.  
Wicha, M. S. See Ervin, P. R., Jr.  
Widom, Cathy Spatz: The cycle of violence. p160 14 Apr 1989.  
Wikström, P. Mikael. See Björk, Glenn R.  
Willumsen, Niels J. See Jetten, Anton M.  
Wilson, Craig M.; Serrano, Adelfa E.; Wasley, Annemarie; Bogenschütz, Michael P.; Shankar, Anuraj H.; Wirth, Dyann F.: Amplification of a gene related to mammalian *mdr* genes in drug-resistant *Plasmodium falciparum*. p1184 9 June 1989.  
Wilson, James M.; Birinyi, Louis K.; Salomon,

Robert N.; Libby, Peter; Callow, Allan D.; Mulligan, Richard C.: Implantation of vascular grafts lined with genetically modified endothelial cells. p1344 16 June 1989.  
Winkler-Oswatitsch, Ruthild. See Eigen, Manfred.  
Wintman, Bruce I. See Hodin, Richard A.  
Wirth, Dyann F. See Wilson, Craig M.  
Wise, George: review of *American Genesis*, by Thomas P. Hughes. p830 19 May 1989.  
Wise, Leigh S. See Chen, Suzie.  
Wong, C.-H.: Enzymatic catalysts in organic synthesis. p1145 9 June 1989.  
Wong, Steven G. See Slamon, Dennis J.  
Wong-Staal, Flossie. See Bosch, Marnix L.  
Wood, Keith V.; Lam, Y. Amy; Seliger, Howard H.; McElroy, William D.: Complementary DNA coding click beetle luciferases can elicit bioluminescence of different colors. p700 12 May 1989.  
Wu, Samuel M. See Yang, Xiong-Li.  
Wuarin, Jérôme. See Maire, Pascal.  
Würsig, Bernd: Cetaceans. p1550 30 June 1989.  
Wyss, André R. See Berta, Annalisa.

## Y-Z

Yaes, Robert J.: The efficient market hypothesis (letter). p1424 23 June 1989.  
Yaglom, Julia. See Rosen, Barry S.  
Yamada, S. See DiMario, J.  
Yang, Xiong-Li and Wu, Samuel M.: Modulation of rod-cone coupling by light. p352 21 Apr 1989.  
Yankaskas, James R. See Jetten, Anton M.  
Yener, K. Aslihan; Özbal, Hadi; Kaptan, Ergun; Pehlivan, A. Necip; Goodway, Martha: Kestel: An early Bronze Age source of tin ore in the Taurus Mountains, Turkey. p200 14 Apr 1989.  
Yewdell, Jonathan W. and Bennink, Jack R.: Brefeldin A specifically inhibits presentation of protein antigens to cytotoxic T lymphocytes. p1069 2 June 1989.  
Yoshimatsu, Tadanori and Nagawa, Fumikiyo: Control of gene expression by artificial introns in *Saccharomyces cerevisiae*. p1346 16 June 1989.  
Youd, T. L. See Holzer, T. L.  
Yu, Chang. See Nelson, Phillip G.  
Yu, Sheau-Fung. See Prpic, Veronica.  
Yue, David T.; Lawrence, John H.; Marban, Eduardo: Two molecular transitions influence cardiac sodium channel gating. p349 21 Apr 1989.  
Zack, Jerome A. See Lee, Helen.  
Zein, Nada; Poncin, Marc; Nilakantan, Ramaswamy; Ellestad, George A.: Calicheamicin  $\gamma_1$  and DNA: molecular recognition process responsible for site-specificity. p697 12 May 1989.  
Zeitlin, Pamela L. See Hwang, Tzyh-Chang.  
Zemel, Sharon. See Millan, Monica A.  
Zettler, Richard L.: review of *The Early History of the Ancient Near East, 9000-2000 B.C.*, by Hans J. Nissen. p370 21 Apr 1989.  
Zeviani, Massimo. See Schon, Eric A.  
Zientek, Michael L. See Lambert, David D.  
Zuber, Mauricio X.; Goodman, Daniel W.; Karns, Larry R.; Fishman, Mark C.: The neuronal growth-associated protein GAP-43 induces filopodia in non-neuronal cells. p1193 9 June 1989.  
Zubrow, Ezra: review of *The Recovery of Meaning*, edited by Mark P. Leone and Parker B. Potter, Jr. p861 19 May 1989.  
Zuker, Michael: On finding all suboptimal foldings of an RNA molecule. p48 7 Apr 1989.  
Zych, Allen D. See O'Neill, Terrence J.